10080926

```
=> d his

     (FILE 'HOME' ENTERED AT 18:46:48 ON 03 JUN 2003)

     FILE 'REGISTRY' ENTERED AT 18:46:57 ON 03 JUN 2003
L1             STRUCTURE UPLOADED
L2           4 S L1

     FILE 'STNGUIDE' ENTERED AT 18:48:12 ON 03 JUN 2003

     FILE 'REGISTRY' ENTERED AT 18:48:59 ON 03 JUN 2003
L3             STRUCTURE UPLOADED
L4           2 S L3

     FILE 'STNGUIDE' ENTERED AT 18:50:17 ON 03 JUN 2003

     FILE 'REGISTRY' ENTERED AT 18:52:33 ON 03 JUN 2003
L5             STRUCTURE UPLOADED
L6           9 S L5

     FILE 'STNGUIDE' ENTERED AT 18:53:30 ON 03 JUN 2003

     FILE 'STNGUIDE' ENTERED AT 18:57:42 ON 03 JUN 2003

     FILE 'REGISTRY' ENTERED AT 18:57:50 ON 03 JUN 2003
L7             STRUCTURE UPLOADED
L8           8 S L7

     FILE 'STNGUIDE' ENTERED AT 19:01:11 ON 03 JUN 2003

     FILE 'REGISTRY' ENTERED AT 19:04:54 ON 03 JUN 2003
L9             STRUCTURE UPLOADED
L10          7 S L9
L11        372 S L9 SSS FULL

     FILE 'CAPLUS' ENTERED AT 19:06:03 ON 03 JUN 2003
L12         78 S L11
L13         10 S L11/THU
L14         68 S L12 NOT L13
L15         11 S L14 AND PATENT/DT
L16         57 S L14 NOT L15

=> d l1
L1 HAS NO ANSWERS
L1              STR
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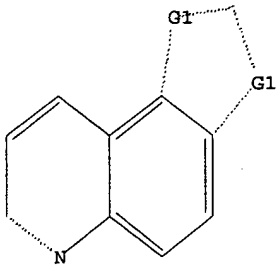


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G1 C,O,S,N


Structure attributes must be viewed using STN Express query preparation.


=> d l3
L3 HAS NO ANSWERS
L3              STR
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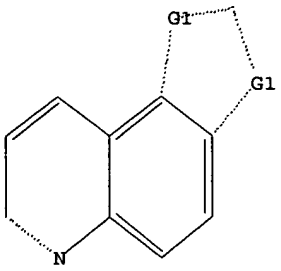

G1 C,O,S,N

Structure attributes must be viewed using STN Express query preparation.

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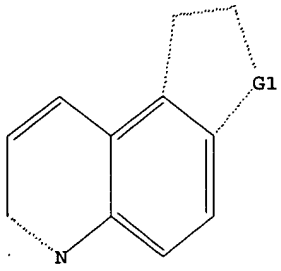
L5 HAS NO ANSWERS
L5 STR



G1 C,O,S,N

Structure attributes must be viewed using STN Express query preparation.

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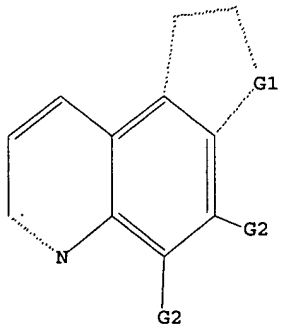
L7 STR



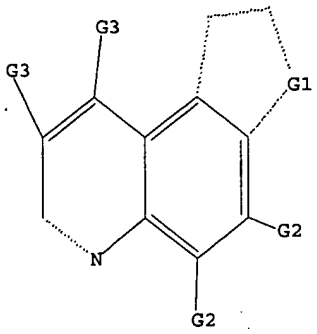
G1 C,O,S,N

G2 C,H,O,S,N

Structure attributes must be viewed using STN Express query preparation.

=> d l9
L9 HAS NO ANSWERS
L9 STR

10080926



G1 C,O,S,N

G2 C,H,O,S,N

G3 H,O,S,N,Cl,Br,F,I,Me,CH2,CH,CF3,CN

Structure attributes must be viewed using STN Express query preparation.

10080926

> d 1-10 bib abs hitstr

L13 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2003 ACS
AN 2002:658121 CAPLUS
DN 137:201294
TI Preparation of pyrroloquinolines, pyridoquinolines, pyranoquinolines, and related tricyclic compounds as androgen receptor modulators
IN Zhi, Lin; Van Oeveren, Cornelis Arjan; Chen, Jyun-Hung; Higuchi, Robert I.
PA Ligand Pharmaceuticals Incorporated, USA
SO PCT Int. Appl., 132 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002066475	A2	20020829	WO 2002-IB537	20020223
	WO 2002066475	A3	20030123		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2002183346	A1	20021205	US 2002-80926	20020222
PRAI	US 2001-271189P	P	20010223		

OS MARPAT 137:201294
GI

this appl

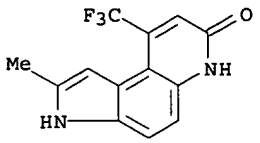
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title nonsteroidal tricyclic compds. I-VIII [wherein R1 = H, halo, NO2, OR12, SO0-2R12, NR12R13, or (un)substituted (halo)alkyl or heteroalkyl; R2 = H, halo, Me, CF3, CHF2, CH2F, CF2Cl, CN, CF2OR12, CH2OR12, OR12, SO0-2R12, NR12R13, or (un)substituted (halo)alkyl, heteroalkyl, alkenyl, or alkynyl; R3-R8 = independently H, halo, OR12, NR12R13, SO0-2R12, or (un)substituted (halo)alkyl, heteroalkyl, alkenyl, alkynyl, (hetero)aryl, or arylalkyl; or R3R5 or R5R7 = a bond; or C2R4R6 or C2R6R8 = (un)substituted carbocyclic or heterocyclic ring; R9 and R10 = independently H, halo, CN, OR12, NR12R13, Cm(R12)2mOR13, SO0-2R12, NR12COR13, or (un)substituted (halo)alkyl, heteroalkyl, or arylalkyl; R11 = H, halo, CN, OR14, NR14R15, SO0-2R14, CH2R14, COR14, CO2R14, CONR13R14, or (un)substituted (halo)alkyl or heteroalkyl; R12 and R13 = independently H or (un)substituted (halo)alkyl, heteroalkyl, alkenyl, alkynyl, or (hetero)aryl; R14 = H, COR15, CO2R15, CONR15R16, or (un)substituted (halo)alkyl, heteroalkyl, or (hetero)aryl; R15 and R16 = independently H or (un)substituted (halo)alkyl, or heteroalkyl; W = O or S; X = O, S, or NR14; Y = O, S, NR12, NOR12, or CR12R13; Z = O, S, or NR12; n = 0-2; m = 0-2; or pharmaceutically acceptable salts thereof] were prepd. as modulators of androgen receptors. For example, cyclization of 6-hydrazino-4-trifluoromethylquinolin-2(1H)-one with 3-pentanone afforded the cis-5,6-dihydro-7H-pyrrolo[3,2-f]quinolin-2(1H)-one. Oxidn. with DDQ in CH2Cl2 gave 6-ethyl-5-methyl-7-(2,2,2-trifluoroethyl)-4-trifluoromethyl-1H-pyrrolo[3,2-f]quinolin-2(1H)-one (IX). The latter exhibited 76% androgen receptor agonist efficacy with a potency (EC50) of 7.6 nM relative to dihydrotestosterone in co-transfection assays using CV-1 cells and displayed androgen receptor binding activity (IC50) of 1.7 nM. Pharmaceutical compns. and formulations of IX are also disclosed. I-VIII are useful for the treatment of acne, male-pattern baldness, impotence, sexual dysfunction, wasting disease, hirsutism, hypogonadism, prostatic hyperplasia, osteoporosis, cancer cachexia, and hormone-dependent cancers (no data). Pharmaceutical compns. and formulations of IX are also disclosed.

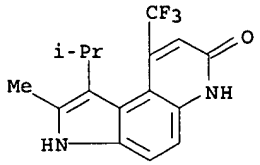
IT **453592-19-3P 453592-20-6P 453592-22-8P**
453592-30-8P 453592-41-1P 453592-46-6P
453592-47-7P 453592-52-4P 453592-53-5P
453592-54-6P 453592-55-7P 453592-56-8P
453592-57-9P 453592-60-4P 453592-71-7P
453592-72-8P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study);

PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(androgen receptor modulator; prepn. of pyrroloquinolines, pyridoquinolines, pyranoquinolines, and related tricyclic compds. as androgen receptor modulators)

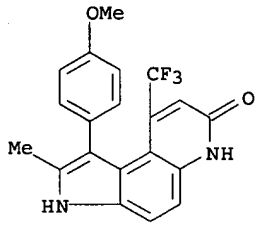
RN 453592-19-3 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 3,6-dihydro-2-methyl-9-(trifluoromethyl)-(9CI) (CA INDEX NAME)



RN 453592-20-6 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 3,6-dihydro-2-methyl-1-(1-methylethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)

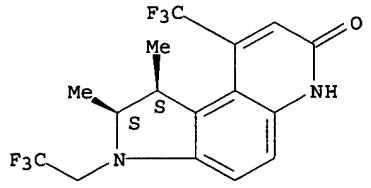


RN 453592-22-8 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 3,6-dihydro-1-(4-methoxyphenyl)-2-methyl-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)



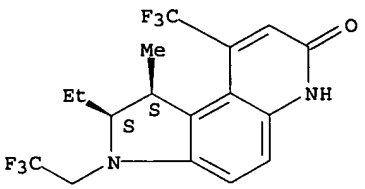
RN 453592-30-8 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 1,2,3,6-tetrahydro-1,2-dimethyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



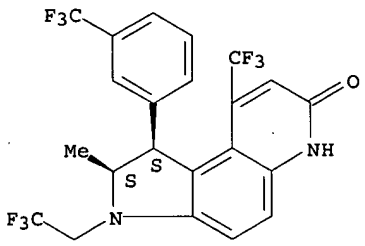
RN 453592-41-1 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 2-ethyl-1,2,3,6-tetrahydro-1-methyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



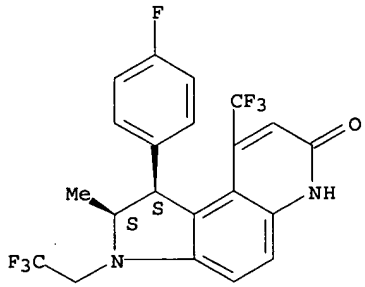
RN 453592-46-6 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 1,2,3,6-tetrahydro-2-methyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)-1-[3-(trifluoromethyl)phenyl]-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



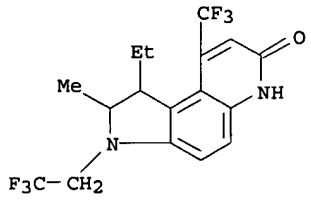
RN 453592-47-7 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 1-(4-fluorophenyl)-1,2,3,6-tetrahydro-2-methyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

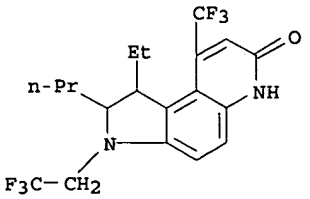


546/84

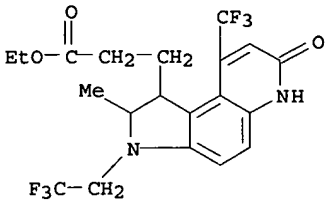
RN 453592-52-4 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 1-ethyl-1,2,3,6-tetrahydro-2-methyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)



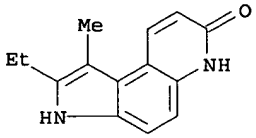
RN 453592-53-5 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 1-ethyl-1,2,3,6-tetrahydro-2-propyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 453592-54-6 CAPLUS
CN 1H-Pyrrolo[3,2-f]quinoline-1-propanoic acid, 2,3,6,7-tetrahydro-2-methyl-7-oxo-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)-, ethyl ester (9CI) (CA INDEX NAME)

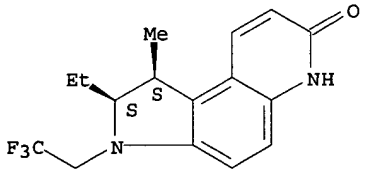


RN 453592-55-7 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 2-ethyl-3,6-dihydro-1-methyl- (9CI) (CA INDEX NAME)

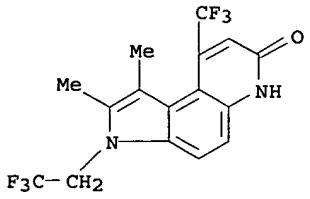


RN 453592-56-8 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 2-ethyl-1,2,3,6-tetrahydro-1-methyl-3-(2,2,2-trifluoroethyl)-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

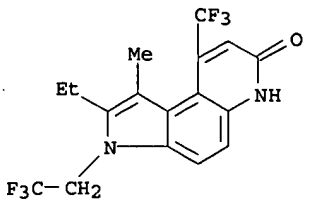
Relative stereochemistry.



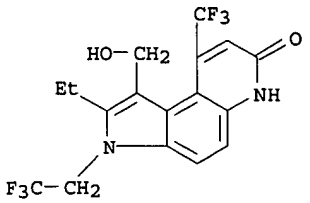
RN 453592-57-9 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 3,6-dihydro-1,2-dimethyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)



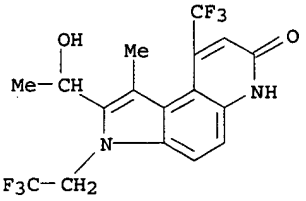
RN 453592-60-4 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 2-ethyl-3,6-dihydro-1-methyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 453592-71-7 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 2-ethyl-3,6-dihydro-1-(hydroxymethyl)-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 453592-72-8 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 3,6-dihydro-2-(1-hydroxyethyl)-1-methyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)



IT **453592-21-7P 453592-23-9P 453592-42-2P**
453592-43-3P 453592-44-4P 453592-45-5P
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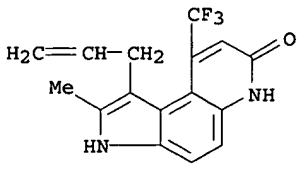
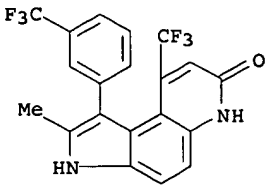
453592-51-3P 453592-58-0P 453592-59-1P
453592-61-5P 453592-62-6P 453592-67-1P
453592-68-2P 453592-69-3P 453592-73-9P
453592-74-0P 453592-75-1P 453592-76-2P
453592-77-3P 453592-78-4P 453592-79-5P
453593-25-4P 453593-26-5P 453593-30-1P
453593-31-2P 453593-32-3P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
. (androgen receptor modulator; prepn. of pyrroloquinolines, pyridoquinolines, pyranoquinolines, and related tricyclic compds. as androgen receptor modulators)

RN 453592-21-7 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 3,6-dihydro-2-methyl-1-(2-propenyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)

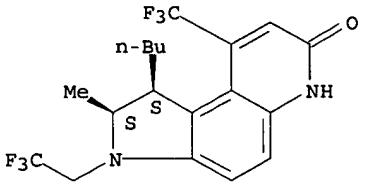


RN 453592-23-9 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 3,6-dihydro-2-methyl-9-(trifluoromethyl)-1-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



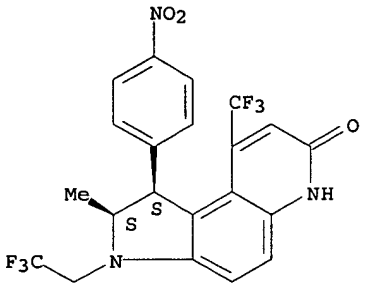
RN 453592-42-2 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 1-butyl-1,2,3,6-tetrahydro-2-methyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



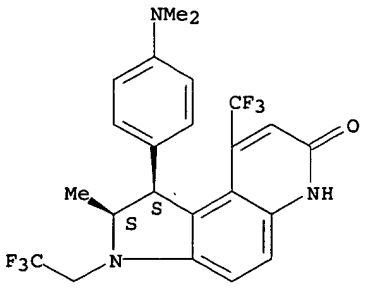
RN 453592-43-3 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 1,2,3,6-tetrahydro-2-methyl-1-(4-nitrophenyl)-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



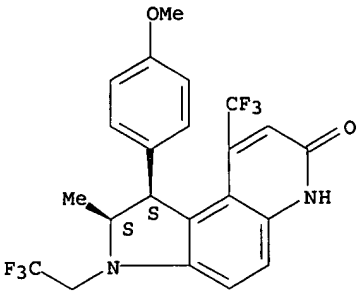
RN 453592-44-4 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 1-[4-(dimethylamino)phenyl]-1,2,3,6-tetrahydro-2-methyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

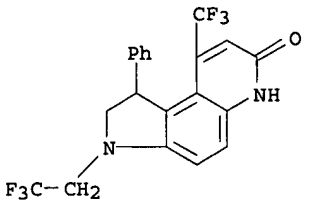


RN 453592-45-5 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 1,2,3,6-tetrahydro-1-(4-methoxyphenyl)-2-methyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

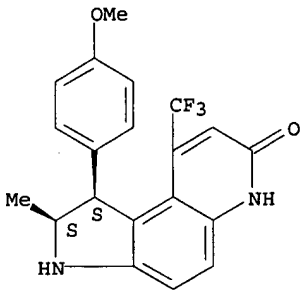


RN 453592-48-8 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 1,2,3,6-tetrahydro-1-phenyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)



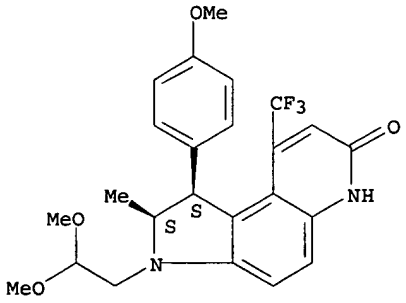
RN 453592-49-9 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 1,2,3,6-tetrahydro-1-(4-methoxyphenyl)-2-methyl-9-(trifluoromethyl)-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



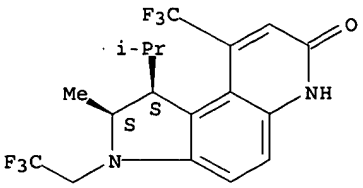
RN 453592-50-2 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 3-(2,2-dimethoxyethyl)-1,2,3,6-tetrahydro-1-(4-methoxyphenyl)-2-methyl-9-(trifluoromethyl)-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

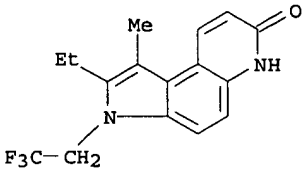


RN 453592-51-3 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 1,2,3,6-tetrahydro-2-methyl-1-(1-methylethyl)-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

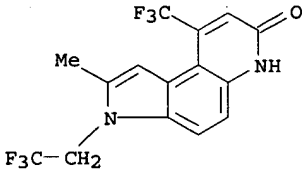
Relative stereochemistry.



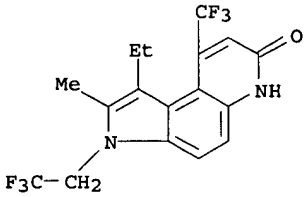
RN 453592-58-0 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 2-ethyl-3,6-dihydro-1-methyl-3-(2,2,2-trifluoroethyl)- (9CI) (CA INDEX NAME)



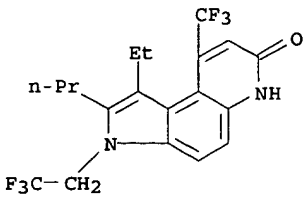
RN 453592-59-1 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 3,6-dihydro-2-methyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 453592-61-5 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 1-ethyl-3,6-dihydro-2-methyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)

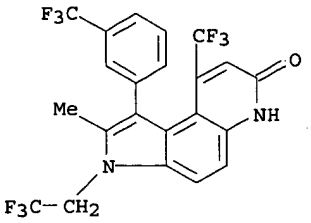


RN 453592-62-6 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 1-ethyl-3,6-dihydro-2-propyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)

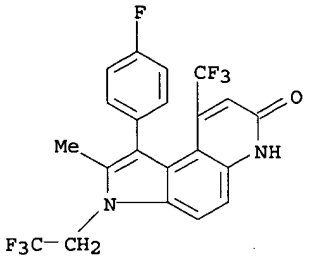


RN 453592-67-1 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 3,6-dihydro-2-methyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)-1-[3-(trifluoromethyl)phenyl]- (9CI)

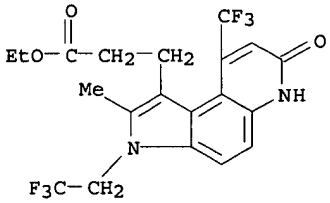
(CA INDEX NAME)



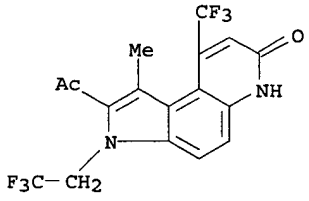
RN 453592-68-2 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 1-(4-fluorophenyl)-3,6-dihydro-2-methyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)



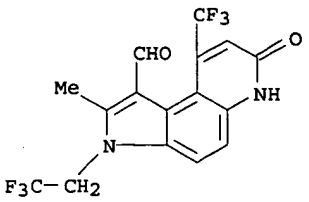
RN 453592-69-3 CAPLUS
CN 3H-Pyrrolo[3,2-f]quinoline-1-propanoic acid, 6,7-dihydro-2-methyl-7-oxo-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)-, ethyl ester (9CI) (CA INDEX NAME)



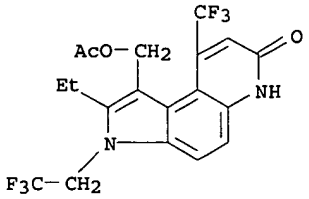
RN 453592-73-9 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 2-acetyl-3,6-dihydro-1-methyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)



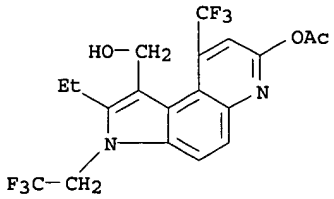
RN 453592-74-0 CAPLUS
CN 3H-Pyrrolo[3,2-f]quinoline-1-carboxaldehyde, 6,7-dihydro-2-methyl-7-oxo-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)



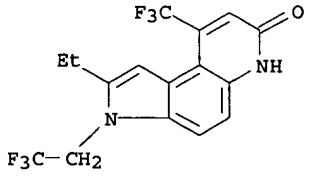
RN 453592-75-1 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 1-[(acetyloxy)methyl]-2-ethyl-3,6-dihydro-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)



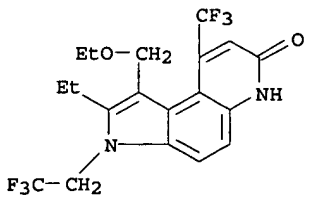
RN 453592-76-2 CAPLUS
CN 3H-Pyrrolo[3,2-f]quinoline-1-methanol, 7-(acetyloxy)-2-ethyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)



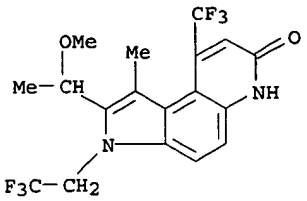
RN 453592-77-3 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 2-ethyl-3,6-dihydro-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)



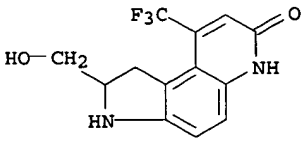
RN 453592-78-4 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 1-(ethoxymethyl)-2-ethyl-3,6-dihydro-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)



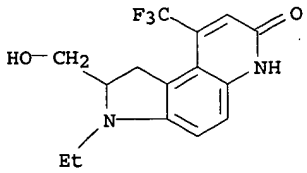
RN 453592-79-5 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 3,6-dihydro-2-(1-methoxyethyl)-1-methyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)



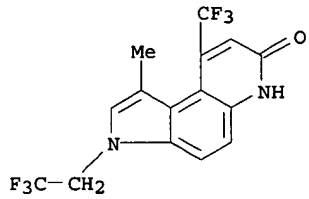
RN 453593-25-4 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 1,2,3,6-tetrahydro-2-(hydroxymethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)



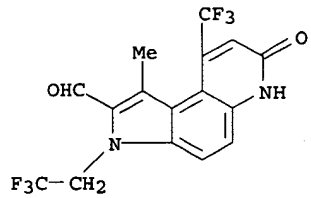
RN 453593-26-5 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 3-ethyl-1,2,3,6-tetrahydro-2-(hydroxymethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 453593-30-1 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 3,6-dihydro-1-methyl-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)

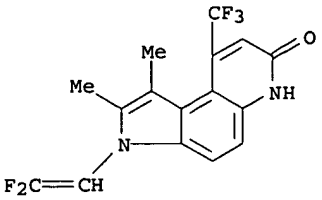


RN 453593-31-2 CAPLUS
CN 3H-Pyrrolo[3,2-f]quinoline-2-carboxaldehyde, 6,7-dihydro-1-methyl-7-oxo-3-(2,2,2-trifluoroethyl)-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 453593-32-3 CAPLUS
CN 7H-Pyrrolo[3,2-f]quinolin-7-one, 3-(2,2-difluoroethenyl)-3,6-dihydro-1,2-dimethyl-9-(trifluoromethyl)- (9CI) (CA INDEX NAME)

10080926



L13 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2003 ACS
AN 2002:575080 CAPLUS
DN 137:149339
TI Anti-cancer 8-substituted quinolines and 2,3-dihydro-1H-pyrrolo[3,2-f]quinoline complexes of cobalt and chromium
IN Denny, William Alexander; Wilson, William Robert; Ware, David Charles; Atwell, Graham John; Milbank, Jared Bruce John; Stevenson, Ralph James
PA Auckland Uniservices Limited, N. Z.
SO PCT Int. Appl., 97 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002059122	A1	20020801	WO 2002-NZ5	20020122

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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PRAI NZ 2001-509540 A 20010124
OS CASREACT 137:149339; MARPAT 137:149339
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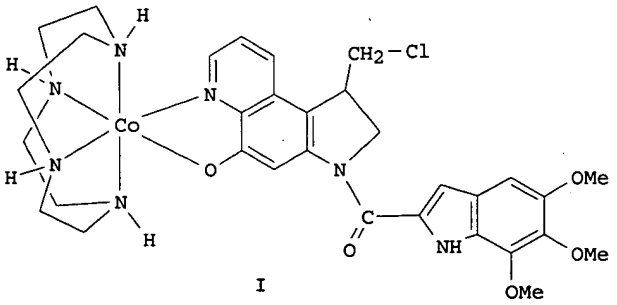


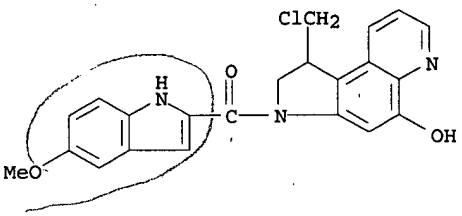
I

AB This invention relates to heterocycles, e.g., 8-substituted quinolines and 2,3-dihydro-1H-pyrrolo[3,2-f]quinolines, and their metal complexes, and is particularly concerned using these compds. in the prepn. of prodrugs or as prodrugs that may be activated under hypoxic conditions by enzymes, non-enzymic endogenous reducing agents, or by therapeutic ionizing radiation, in the treatment of cancer. Selected ligands and their cobalt(III) or chromium(III) complexes were evaluated for cytotoxicity in mammalian cell lines (AA8 Chinese hamster ovarian line, UV4 cell line as repair-defective ERCC-1 mutant, EMT6 murine mammary carcinoma line, and SKOV3 human ovarian cancer line). Thus, cobalt(III) cyclen complex I(ClO4)2 (M1) was prepd. and evaluated for cytotoxicity relative to the cytotoxic 2,3-dihydro-1H-pyrrolo[3,2-f]quinoline free ligand. Complexation of the 2,3-dihydro-1H-pyrrolo[3,2-f]quinoline in M1 resulted in considerable abrogation of cytotoxicity, indicating the utility of this approach in forming less toxic prodrugs of these cytotoxins. Complex M1 was also able to release the cytotoxic ligand in good yield when exposed to ionizing radiation in deoxygenated sodium formate buffer; a mechanism of activation of the M1 prodrug is briefly discussed. The invention also relates to the use of these heterocycles and the corresponding metal

complexes in the prepn. of medicaments and to compns. including the heterocycles or their metal complexes and to methods for prepg. these compds.

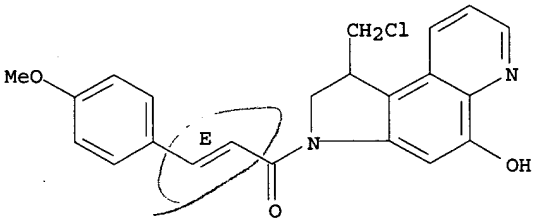
IT **444565-29-1P 444565-30-4P 444565-31-5P**
RL: SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(for prepn. of 2,3-dihydro-1H-pyrrolo[3,2-f]quinoline complexes of cobalt and chromium as anti-cancer prodrugs)

RN 444565-29-1 CAPLUS
CN 1H-Pyrrolo[3,2-f]quinolin-5-ol, 1-(chloromethyl)-2,3-dihydro-3-[(5-methoxy-1H-indol-2-yl)carbonyl]- (9CI) (CA INDEX NAME)



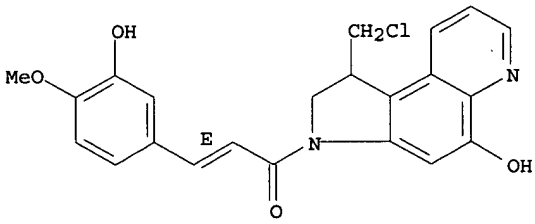
RN 444565-30-4 CAPLUS
CN 1H-Pyrrolo[3,2-f]quinolin-5-ol, 1-(chloromethyl)-2,3-dihydro-3-[(2E)-3-(4-methoxyphenyl)-1-oxo-2-propenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



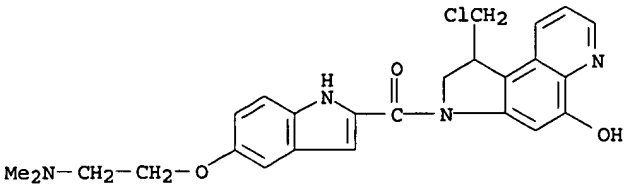
RN 444565-31-5 CAPLUS
CN 1H-Pyrrolo[3,2-f]quinolin-5-ol, 1-(chloromethyl)-2,3-dihydro-3-[(2E)-3-(3-hydroxy-4-methoxyphenyl)-1-oxo-2-propenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



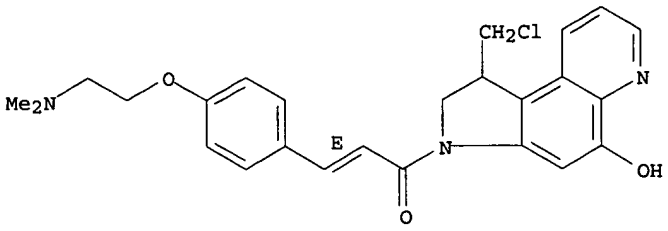
IT **444565-27-9P 444565-28-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(intermediate; prepn. of 2,3-dihydro-1H-pyrrolo[3,2-f]quinoline complexes of cobalt and chromium as anti-cancer prodrugs)

RN 444565-27-9 CAPLUS
CN 1H-Pyrrolo[3,2-f]quinolin-5-ol, 1-(chloromethyl)-3-[[5-[2-(dimethylamino)ethoxy]-1H-indol-2-yl]carbonyl]-2,3-dihydro- (9CI) (CA INDEX NAME)

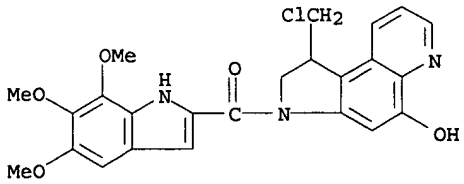


RN 444565-28-0 CAPLUS
CN 1H-Pyrrolo[3,2-f]quinolin-5-ol, 1-(chloromethyl)-3-[(2E)-3-[4-[2-(dimethylamino)ethoxy]phenyl]-1-oxo-2-propenyl]-2,3-dihydro- (9CI) (CA INDEX NAME)

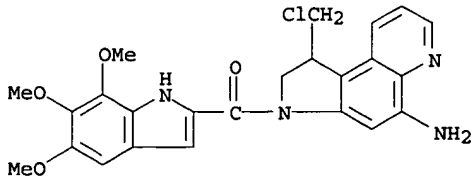
Double bond geometry as shown.



IT **444565-08-6P**
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn., cytotoxicity, and complexation with cobalt or chromium as anti-cancer prodrugs)
RN 444565-08-6 CAPLUS
CN 1H-Pyrrolo[3,2-f]quinolin-5-ol, 1-(chloromethyl)-2,3-dihydro-3-[(5,6,7-trimethoxy-1H-indol-2-yl)carbonyl]- (9CI) (CA INDEX NAME)



IT **444565-16-6P**
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn., cytotoxicity, and complexation with cobalt or chromium as anti-cancer prodrugs)
RN 444565-16-6 CAPLUS
CN 1H-Pyrrolo[3,2-f]quinolin-5-amine, 1-(chloromethyl)-2,3-dihydro-3-[(5,6,7-trimethoxy-1H-indol-2-yl)carbonyl]- (9CI) (CA INDEX NAME)



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

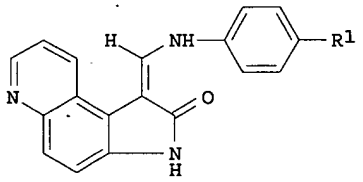
L13 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2003 ACS
AN 2002:185120 CAPLUS
DN 136:232284

10080926

TI Preparation of pyrrolo[3,2-f]quinolin-2-ones as CDK4 inhibitors
IN Dickerson, Scott Howard; Drewry, David Harold
PA Glaxo Group Limited, UK
SO PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002020524	A1	20020314	WO 2001-US20703	20010628
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 2001071611	A5	20020322	AU 2001-71611	20010628
EP 1313732	A1	20030528	EP 2001-950642	20010628
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRAI US 2000-230241P	P	20000901		
WO 2001-US20703	W	20010628		

OS MARPAT 136:232284
GI



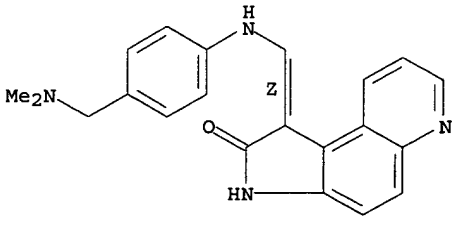
I

AB Oxindole derivs., specifically pyrrolo[3,2-f]quinolin-2-ones I [R1 = (CR4R5)nNR2R3 and n = 1, 2; R2, R3 = H, alkyl, alkenyl, cycloalkyl, heterocyclyl, etc.; R4, R5 = H, alkyl, heterocyclyl, CH2Ph, Ph, etc.], which are useful as CDK4 inhibitors, are described herein. E.g., prepn. of 1-[(Z)-(4-dimethylaminomethylanilino)methylidene]-1,3-dihydro-2H-pyrrolo[3,2-f]quinoline-2-one by reaction of dimethylaminomethylidene-1,3-dihydro-2H-pyrrolo[3,2-f]quinolin-2-one with 4-dimethylaminomethylaniline is described. Methods of using the same compds. in the treatment of hyperproliferative diseases was described.

IT **403713-22-4P 403713-23-5P 403713-24-6P**
403713-26-8P 403713-27-9P 403713-28-0P
403713-29-1P 403713-30-4P 403713-32-6P
403713-34-8P 403713-36-0P 403713-38-2P
403713-40-6P 403713-42-8P 403713-43-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of pyrrolo[3,2-f]quinolin-2-ones as CDK4 inhibitors)

RN 403713-22-4 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1-[[[4-[(dimethylamino)methyl]phenyl]amino]methylene]-1,3-dihydro-, (1Z)- (9CI) (CA INDEX NAME)

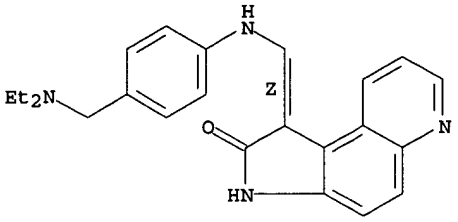
Double bond geometry as shown.



RN 403713-23-5 CAPLUS

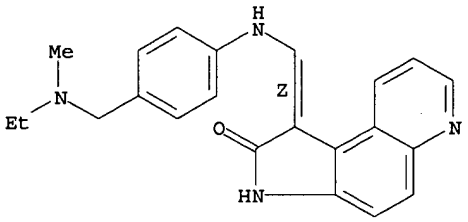
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1-[[[4-[(diethylamino)methyl]phenyl]amino]methylene]-1,3-dihydro-, (1Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



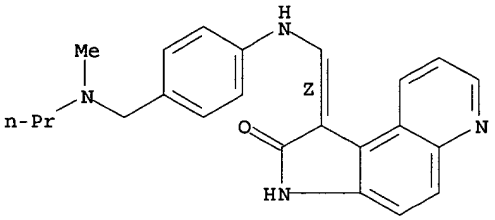
RN 403713-24-6 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1-[[[4-[(ethylmethylamino)methyl]phenyl]a mino]methylene]-1,3-dihydro-, (1Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



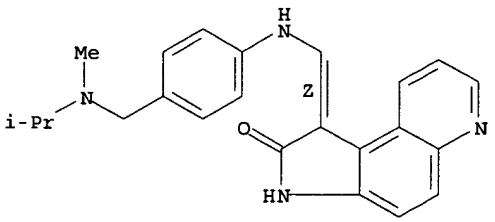
RN 403713-26-8 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1,3-dihydro-1-[[[4-[(methylpropylamino)methyl]phenyl]amino]methylene]-, (1Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



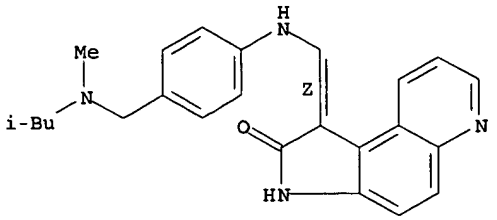
RN 403713-27-9 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1,3-dihydro-1-[[[4-[[methyl(1-methylethyl)amino]methyl]phenyl]amino]methylene]-, (1Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



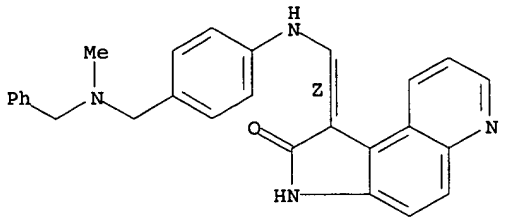
RN 403713-28-0 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1,3-dihydro-1-[[[4-[[methyl(2-methylpropyl)amino]methyl]phenyl]amino]methylene]-, (1Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



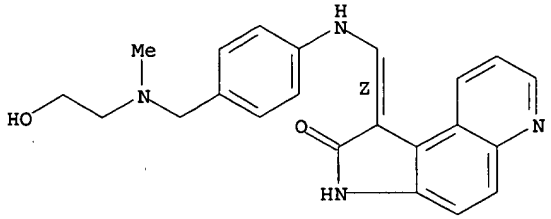
RN 403713-29-1 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1,3-dihydro-1-[[[4-[[methyl(phenylmethyl)amino]methyl]phenyl]amino]methylene]-, (1Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



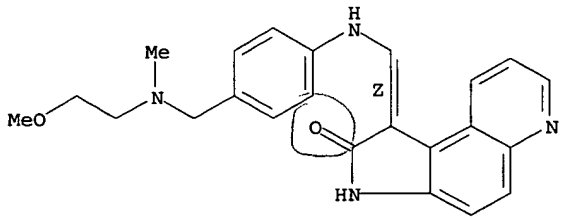
RN 403713-30-4 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1,3-dihydro-1-[[[4-[[(2-hydroxyethyl)methylamino]methyl]phenyl]amino]methylene]-, (1Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



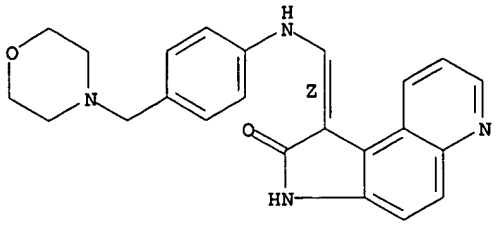
RN 403713-32-6 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1,3-dihydro-1-[[[4-[[(2-methoxyethyl)methylamino]methyl]phenyl]amino]methylene]-, (1Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



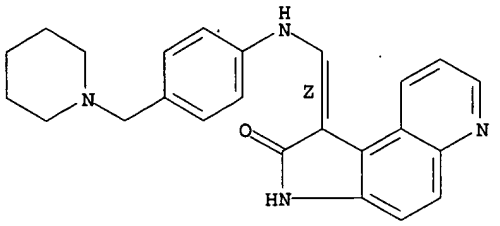
RN 403713-34-8 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1,3-dihydro-1-[[[4-(4-morpholinylmethyl)phenyl]amino]methylene]-, (1Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



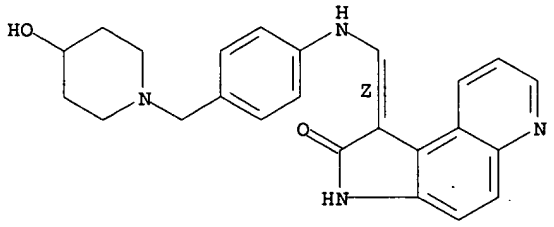
RN 403713-36-0 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1,3-dihydro-1-[[[4-(1-piperidinylmethyl)phenyl]amino]methylene]-, (1Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



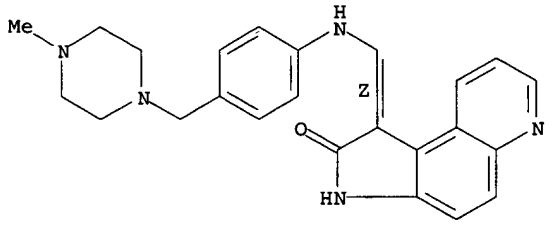
RN 403713-38-2 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1,3-dihydro-1-[[[4-[(4-hydroxy-1-piperidinyl)methyl]phenyl]amino]methylene]-, (1Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 403713-40-6 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1,3-dihydro-1-[[[4-[(4-methyl-1-piperazinyl)methyl]phenyl]amino]methylene]-, (1Z)- (9CI) (CA INDEX NAME)

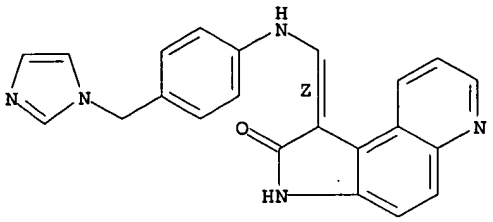
Double bond geometry as shown.



RN 403713-42-8 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1,3-dihydro-1-[[[4-(1H-imidazol-1-ylmethyl)phenyl]amino]methylene]-, (1Z)- (9CI) (CA INDEX NAME)

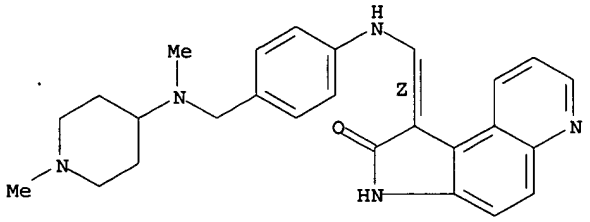
Double bond geometry as shown.

10080926



RN 403713-43-9 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1,3-dihydro-1-[[[4-[[methyl(1-methyl-4-piperidinyl)amino]methyl]phenyl]amino]methylene]-, (1Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

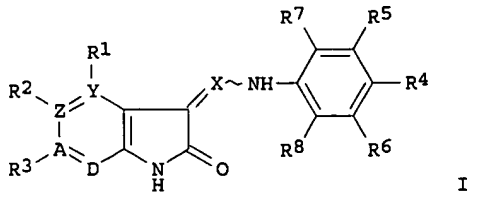


RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

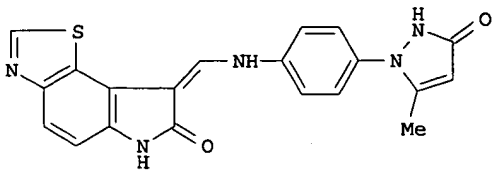
L13 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2003 ACS
AN 2000:688216 CAPLUS
DN 133:266726
TI Preparation of 3-(anilinomethylene)oxindoles and analogs as protein tyrosine kinase and protein serine/threonine kinase inhibitors
IN Glennon, Kimberley Caroline; Kuyper, Lee Frederick; Lackey, Karen Elizabeth; McNutt, Robert Walton, Jr.
PA Glaxo Group Limited, UK
SO PCT Int. Appl., 189 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000056710	A1	20000928	WO 2000-US5057	20000228
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1165514	A1	20020102	EP 2000-913643	20000228
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	US 6350747	B1	20020226	US 2000-514528	20000228
	JP 2002540097	T2	20021126	JP 2000-606572	20000228
	US 6498176	B1	20021224	US 2001-914063	20010822
	US 2002099071	A1	20020725	US 2001-966318	20010927
PRAI	GB 1999-4933	A	19990304		
	US 2000-514528	A3	20000228		
	WO 2000-US5057	W	20000228		

OS MARPAT 133:266726
GI



I



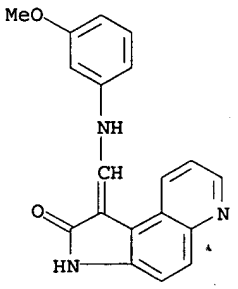
II

AB The title compds. (I) [wherein X = N, CH, CCF3, or C(aliph.); Y, Z, A, and D = C or N, and the no. of N .ltoreq. 1; R1 = H, aliph., SH, hydroxy(aliph.), aryl(aliph.), cycloalkyl(aliph.), heterocyclyl(aliph.), (un)substituted NH2, CONH2, or SO2NH2, alkoxycarbonyl, halo, CN, or NO2; R2 = H, aliph., hydroxyimino aliph., alkoxy(carbonyl), hydroxyaliph., aryl(oxycarbonyl), heterocyclyl, (un)substituted CONH2, NH2, or SO2NH2, halo, OH, NO2, aliph. sulfonyl, etc.; or R1 and R2 are joined to form an (un)substituted fused heterocyclic ring; R3 = H, aliph., hydroxy(aliph.), (un)substituted NH2, CONH2, or SO2NH2, alkoxy, aryl(oxy), hydroxyaryl, (hydroxy)heterocyclyl, heterocyclyloxy, or halo; or R2 and R3 are joined to form an (un)substituted fused heterocyclic ring; R4 = SO3H, (aliph.)sulfonyl(aliph.), (un)substituted SO2NH2, NH2, CONH2, etc.; R5 = H; or R4 and R5 are joined to form an (un)substituted fused heterocyclic ring] were prepd. via std. synthetic methods and soln. phase library techniques as vascular endothelial growth factor receptor type 2 (VEGFR-2), cyclin dependent kinase 2 (CDK2), tyrosine kinase Tie-2 receptor, and colony-stimulating factor 1 receptor kinase (c-fms) inhibitors. For example, a mixt. of 8-dimethylaminomethylene-6,8-dihydro-1-thia-3,6-diaza-as-indacene-7-one (prepn. given) and 2-(4-aminophenyl)-3-methylpyrazolin-5-one in abs. EtOH was heated with stirring at 90.degree.C for 16 h to give (Z)-II (83%). In substrate phosphorylation assays, II inhibited VEGFR-2 and CDK2 with IC50 values of 1-10 .mu.M and 11-50 .mu.M, resp. I are useful as therapeutic agents in disease states alleviated by the inhibition or antagonism of protein kinase activated signalling pathways in general, and in particular in the pathol. processes which involve aberrant cellular proliferation, such as tumor growth, restenosis, atherosclerosis, and thrombosis. I are particularly useful for suppressing tumor growth by inhibiting tumor-related angiogenesis.

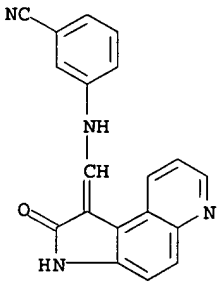
IT **297754-16-6P**, 1-[(3-Methoxyanilino)methylidene]-1,3-dihydro-2H-pyrrolo[3,2-f]quinolin-2-one **297754-17-7P**, 3-[[(2-Oxo-2,3-dihydro-1H-pyrrolo[3,2-f]quinolin-1-ylidene)methyl]amino]benzonitrile **297754-18-8P**, 1-(4-Toluidinomethylidene)-1,3-dihydro-2H-pyrrolo[3,2-f]quinolin-2-one **297754-19-9P**, 1-[(4-Methoxyanilino)methylidene]-1,3-dihydro-2H-pyrrolo[3,2-f]quinolin-2-one **297754-31-5P**, 1-[[4-(4-Morpholinyl)anilino]methylidene]-1,3-dihydro-2H-pyrrolo[3,2-f]quinolin-2-one **297754-32-6P** **297754-33-7P**, N-[4-[[(2-Oxo-2,3-dihydro-1H-pyrrolo[3,2-f]quinolin-1-ylidene)methyl]amino]phenyl]acetamide **297754-34-8P** **297754-35-9P**, 4-[[(2-Oxo-2,3-dihydro-1H-pyrrolo[3,2-f]quinolin-1-ylidene)methyl]amino]benzamide **297754-36-0P** **297754-64-4P** , 1-[(4-Phenoxyanilino)methylidene]-1,3-dihydro-2H-pyrrolo[3,2-f]quinolin-2-one **297754-65-5P** **297754-68-8P**, Methyl 4-[4-[[(2-Oxo-2,3-dihydro-1H-pyrrolo[3,2-f]quinolin-1-ylidene)methyl]amino]phenoxy]benzoate **297754-69-9P**, Methyl 3-[4-[[(2-Oxo-2,3-dihydro-1H-pyrrolo[3,2-f]quinolin-1-ylidene)methyl]amino]phenoxy]benzoate **297754-72-4P**, 3-Ethyl-3-[4-[[(2-oxo-2,3-dihydro-1H-pyrrolo[3,2-f]quinolin-1-ylidene)methyl]amino]phenyl]-2,6-piperidinedione **297754-75-7P**, 1-[(4-Benzoylanilino)methylidene]-1,3-dihydro-2H-pyrrolo[3,2-f]quinolin-2-one **297754-77-9P**, 1-[[3-(Hydroxymethyl)anilino]methylidene]-1,3-dihydro-2H-pyrrolo[3,2-f]quinolin-2-one **297754-80-4P** **297754-81-5P**, 3-[[(2-Oxo-2,3-dihydro-1H-pyrrolo[3,2-f]quinolin-1-ylidene)methyl]amino]benzamide **297754-82-6P**, 4-[[(2-Oxo-2,3-dihydro-1H-pyrrolo[3,2-f]quinolin-1-ylidene)methyl]amino]benzonitrile **297754-83-7P**, Methyl 4-[[(2-oxo-2,3-dihydro-1H-pyrrolo[3,2-f]quinolin-1-ylidene)methyl]amino]benzoate **297754-87-1P**, 1-[[4-[[2-

(Diethylamino)ethyl]sulfonyl]anilino]methylidene]-1H-pyrrolo[3,2-f]quinolin-2(3H)-one **297756-51-5P**, 1-[(Z)-(3-Methoxyanilino)methylidene]-1,3-dihydro-2H-pyrrolo[3,2-f]quinolin-2-one **297756-52-6P 297756-53-7P 297756-54-8P 297756-62-8P 297756-63-9P 297756-64-0P 297756-65-1P 297756-66-2P 297756-67-3P**, 1-[(Z)-(4-Hydroxyanilino)methylidene]-1,3-dihydro-2H-pyrrolo[3,2-f]quinolin-2-one **297756-91-3P**, 1-[(Z)-(4-Phenoxyanilino)methylidene]-1,3-dihydro-2H-pyrrolo[3,2-f]quinolin-2-one **297756-92-4P**, 1-[(Z)-[4-(Benzyloxy)anilino]methylidene]-1,3-dihydro-2H-pyrrolo[3,2-f]quinolin-2-one **297756-93-5P 297756-94-6P 297756-95-7P 297756-96-8P**, 1-[(Z)-(4-Benzoylanilino)methylidene]-1,3-dihydro-2H-pyrrolo[3,2-f]quinolin-2-one **297756-97-9P 297756-98-0P 297756-99-1P 297757-00-7P 297757-01-8P 297757-02-9P 297757-04-1P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of anilinomethylene oxindolones and analogs as protein tyrosine kinase and protein serine/threonine kinase inhibitors by alkylation and amination of oxindolones via std. or soln. phase library methods)

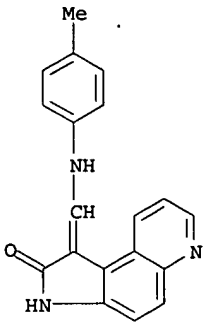
RN 297754-16-6 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1,3-dihydro-1-[[(3-methoxyphenyl)amino]methylene]- (9CI) (CA INDEX NAME)



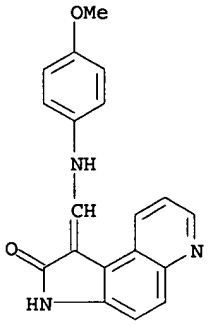
RN 297754-17-7 CAPLUS
CN Benzonitrile, 3-[[(2,3-dihydro-2-oxo-1H-pyrrolo[3,2-f]quinolin-1-ylidene)methyl]amino]- (9CI) (CA INDEX NAME)



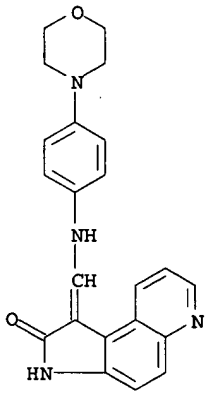
RN 297754-18-8 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1,3-dihydro-1-[[(4-methylphenyl)amino]methylene]- (9CI) (CA INDEX NAME)



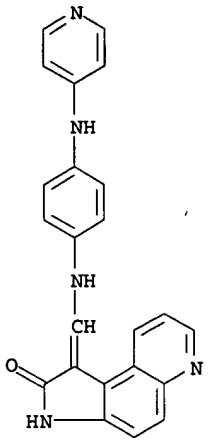
RN 297754-19-9 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1,3-dihydro-1-[[(4-methoxyphenyl)amino]methylene]- (9CI) (CA INDEX NAME)



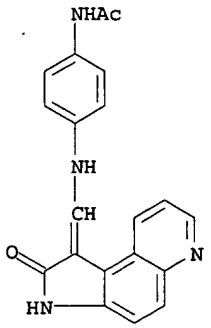
RN 297754-31-5 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1,3-dihydro-1-[[[4-(4-morpholinyl)phenyl]amino]methylene]- (9CI) (CA INDEX NAME)



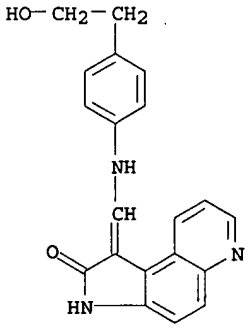
RN 297754-32-6 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1,3-dihydro-1-[[[4-(4-pyridinylamino)phenyl]amino]methylene]- (9CI) (CA INDEX NAME)



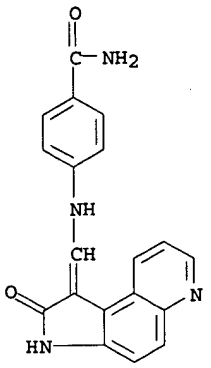
RN 297754-33-7 CAPLUS
CN Acetamide, N-[4-[[(2,3-dihydro-2-oxo-1H-pyrrolo[3,2-f]quinolin-1-ylidene)methyl]amino]phenyl]- (9CI) (CA INDEX NAME)



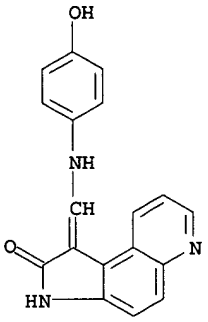
RN 297754-34-8 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1,3-dihydro-1-[[[4-(2-hydroxyethyl)phenyl]amino]methylene]- (9CI) (CA INDEX NAME)



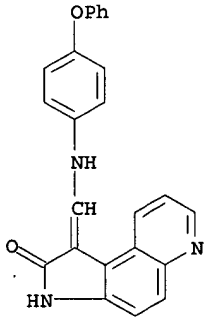
RN 297754-35-9 CAPLUS
CN Benzamide, 4-[[(2,3-dihydro-2-oxo-1H-pyrrolo[3,2-f]quinolin-1-ylidene)methyl]amino]- (9CI) (CA INDEX NAME)



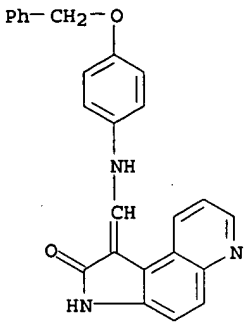
RN 297754-36-0 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1,3-dihydro-1-[[(4-hydroxyphenyl)amino]methylene]- (9CI) (CA INDEX NAME)



RN 297754-64-4 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1,3-dihydro-1-[[(4-phenoxyphenyl)amino]methylene]- (9CI) (CA INDEX NAME)



RN 297754-65-5 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1,3-dihydro-1-[[[4-(phenylmethoxy)phenyl]amino]methylene]- (9CI) (CA INDEX NAME)



RN 297754-68-8 CAPLUS
CN Benzoic acid, 4-[4-[[(2,3-dihydro-2-oxo-1H-pyrrolo[3,2-f]quinolin-1-ylidene)methyl]amino]phenoxy]-, methyl ester (9CI) (CA INDEX NAME)

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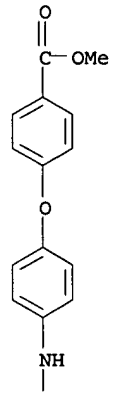

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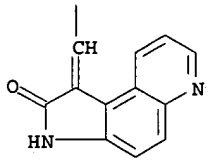
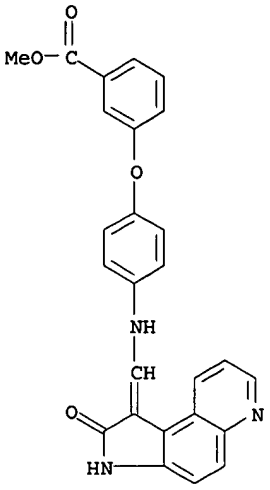
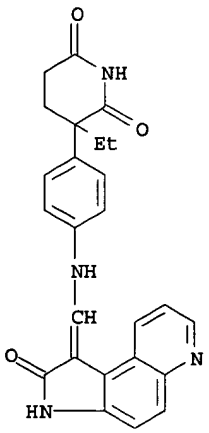


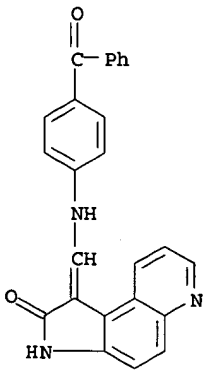
RN 297754-69-9 CAPLUS
CN Benzoic acid, 3-[4-[[(2,3-dihydro-2-oxo-1H-pyrrolo[3,2-f]quinolin-1-ylidene)methyl]amino]phenoxy]-, methyl ester (9CI) (CA INDEX NAME)



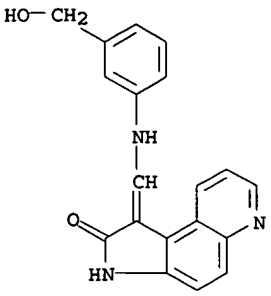
RN 297754-72-4 CAPLUS
CN 2,6-Piperidinedione, 3-[4-[[(2,3-dihydro-2-oxo-1H-pyrrolo[3,2-f]quinolin-1-ylidene)methyl]amino]phenyl]-3-ethyl- (9CI) (CA INDEX NAME)



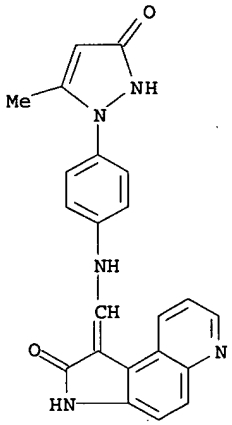
RN 297754-75-7 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1-[[(4-benzoylphenyl)amino]methylene]-1,3-dihydro- (9CI) (CA INDEX NAME)



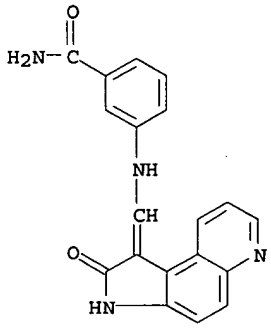
RN 297754-77-9 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1,3-dihydro-1-[[[3-(hydroxymethyl)phenyl]amino]methylene]- (9CI) (CA INDEX NAME)



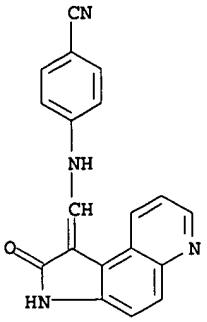
RN 297754-80-4 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1-[[[4-(2,3-dihydro-5-methyl-3-oxo-1H-pyrazol-1-yl)phenyl]amino]methylene]-1,3-dihydro- (9CI) (CA INDEX NAME)



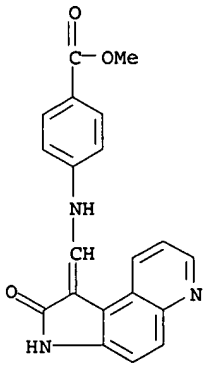
RN 297754-81-5 CAPLUS
CN Benzamide, 3-[[(2,3-dihydro-2-oxo-1H-pyrrolo[3,2-f]quinolin-1-ylidene)methyl]amino]- (9CI) (CA INDEX NAME)



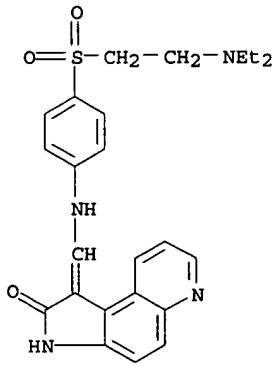
RN 297754-82-6 CAPLUS
CN Benzonitrile, 4-[[(2,3-dihydro-2-oxo-1H-pyrrolo[3,2-f]quinolin-1-ylidene)methyl]amino]- (9CI) (CA INDEX NAME)



RN 297754-83-7 CAPLUS
CN Benzoic acid, 4-[[(2,3-dihydro-2-oxo-1H-pyrrolo[3,2-f]quinolin-1-ylidene)methyl]amino]-, methyl ester (9CI) (CA INDEX NAME)

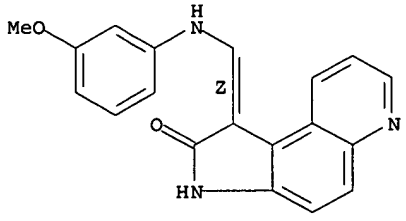


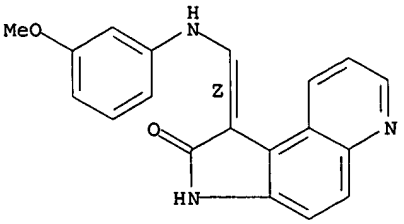
RN 297754-87-1 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1-[[[4-[[2-(diethylamino)ethyl]sulfonyl]phenyl]amino]methylene]-1,3-dihydro- (9CI) (CA INDEX NAME)



RN 297756-51-5 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1,3-dihydro-1-[[(3-methoxyphenyl)amino]methylene]-, (1Z)- (9CI) (CA INDEX NAME)

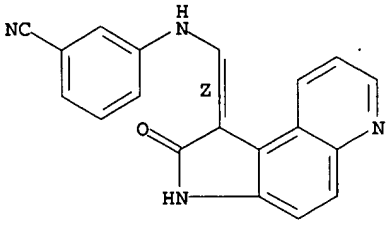
Double bond geometry as shown.





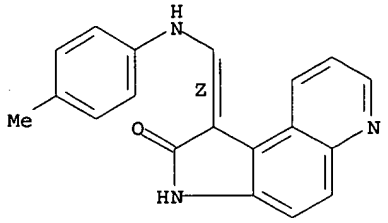
RN 297756-52-6 CAPLUS
CN Benzonitrile, 3-[[(Z)-(2,3-dihydro-2-oxo-1H-pyrrolo[3,2-f]quinolin-1-ylidene)methyl]amino]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



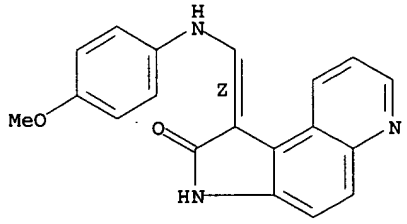
RN 297756-53-7 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1,3-dihydro-1-[[(4-methylphenyl)amino]methylene]-, (1Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



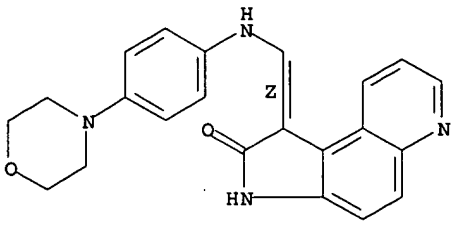
RN 297756-54-8 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1,3-dihydro-1-[[(4-methoxyphenyl)amino]methylene]-, (1Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



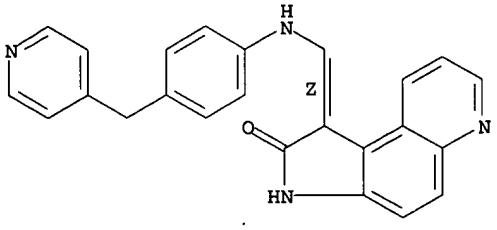
RN 297756-62-8 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1,3-dihydro-1-[[[4-(4-morpholinyl)phenyl]amino]methylene]-, (1Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



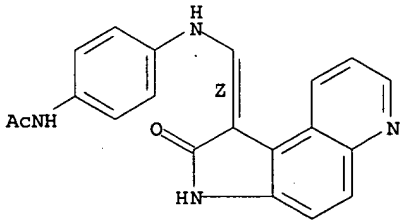
RN 297756-63-9 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1,3-dihydro-1-[[[4-(4-pyridinylmethyl)phenyl]amino]methylene]-, (1Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



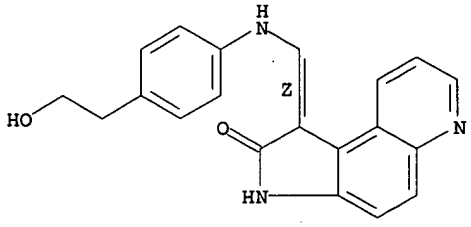
RN 297756-64-0 CAPLUS
CN Acetamide, N-[4-[[(Z)-(2,3-dihydro-2-oxo-1H-pyrrolo[3,2-f]quinolin-1-ylidene)methyl]amino]phenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



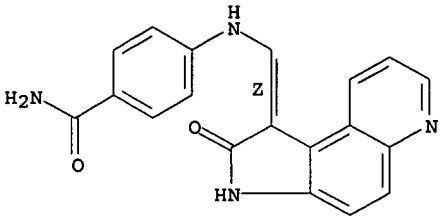
RN 297756-65-1 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1,3-dihydro-1-[[[4-(2-hydroxyethyl)phenyl]amino]methylene]-, (1Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



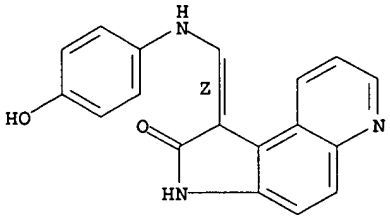
RN 297756-66-2 CAPLUS
CN Benzamide, 4-[[(Z)-(2,3-dihydro-2-oxo-1H-pyrrolo[3,2-f]quinolin-1-ylidene)methyl]amino]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



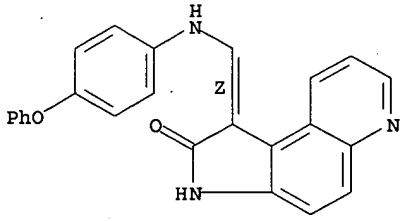
RN 297756-67-3 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1,3-dihydro-1-[[(4-hydroxyphenyl)amino]methylene]-, (1Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



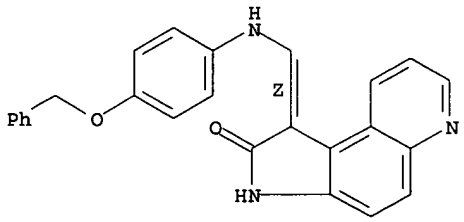
RN 297756-91-3 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1,3-dihydro-1-[[(4-phenoxyphenyl)amino]methylene]-, (1Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



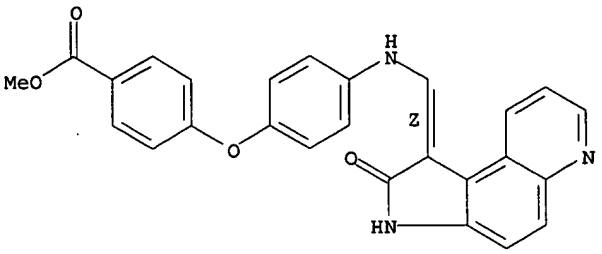
RN 297756-92-4 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1,3-dihydro-1-[[[4-(phenylmethoxy)phenyl]amino]methylene]-, (1Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



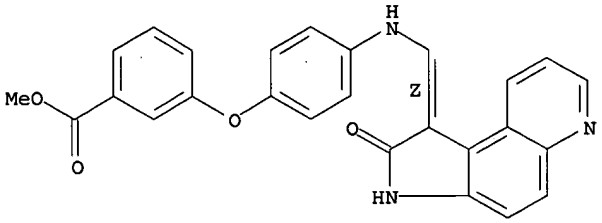
RN 297756-93-5 CAPLUS
CN Benzoic acid, 4-[4-[[(Z)-(2,3-dihydro-2-oxo-1H-pyrrolo[3,2-f]quinolin-1-ylidene)methyl]amino]phenoxy]-, methyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.



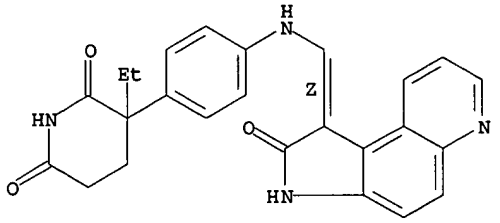
RN 297756-94-6 CAPLUS
CN Benzoic acid, 3-[4-[[(Z)-(2,3-dihydro-2-oxo-1H-pyrrolo[3,2-f]quinolin-1-ylidene)methyl]amino]phenoxy]-, methyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.



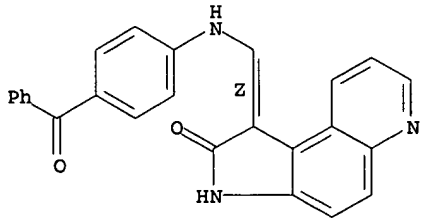
RN 297756-95-7 CAPLUS
CN 2,6-Piperidinedione, 3-[4-[[(Z)-(2,3-dihydro-2-oxo-1H-pyrrolo[3,2-f]quinolin-1-ylidene)methyl]amino]phenyl]-3-ethyl- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



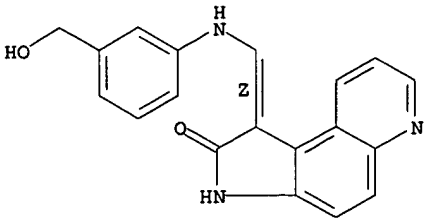
RN 297756-96-8 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1-[[(4-benzoylphenyl)amino]methylene]-1,3-dihydro-, (1Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



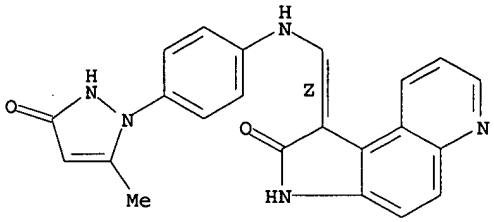
RN 297756-97-9 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1,3-dihydro-1-[[[3-(hydroxymethyl)phenyl]amino]methylene]-, (1Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



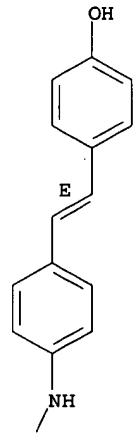
RN 297756-98-0 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1-[[[4-(2,3-dihydro-5-methyl-3-oxo-1H-pyrazol-1-yl)phenyl]amino]methylene]-1,3-dihydro-, (1Z)- (9CI) (CA INDEX NAME)

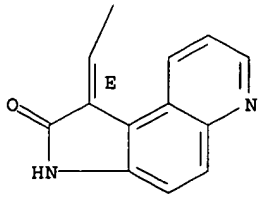
Double bond geometry as shown.



RN 297756-99-1 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1,3-dihydro-1-[[[4-[(1E)-2-(4-hydroxyphenyl)ethenyl]phenyl]amino]methylene]-, (1E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

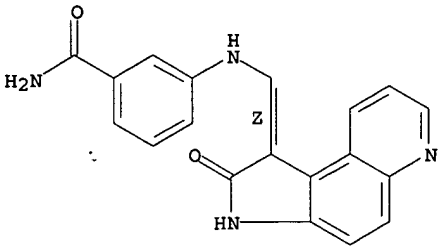




10080926

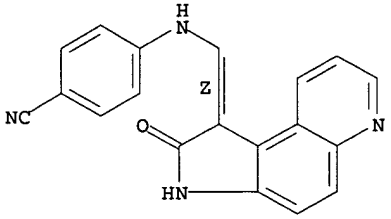
RN 297757-00-7 CAPLUS
CN Benzamide, 3-[[(Z)-(2,3-dihydro-2-oxo-1H-pyrrolo[3,2-f]quinolin-1-ylidene)methyl]amino]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



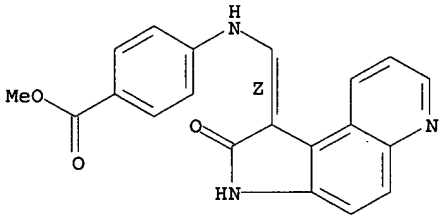
RN 297757-01-8 CAPLUS
CN Benzonitrile, 4-[[(Z)-(2,3-dihydro-2-oxo-1H-pyrrolo[3,2-f]quinolin-1-ylidene)methyl]amino]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



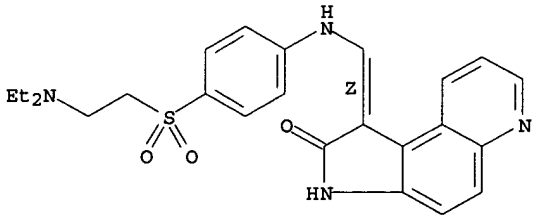
RN 297757-02-9 CAPLUS
CN Benzoic acid, 4-[[(Z)-(2,3-dihydro-2-oxo-1H-pyrrolo[3,2-f]quinolin-1-ylidene)methyl]amino]-, methyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 297757-04-1 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1-[[[4-[[2-(diethylamino)ethyl]sulfonyl]phenyl]amino]methylene]-1,3-dihydro-, (1Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

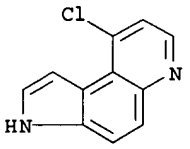


RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2003 ACS
AN 2000:454835 CAPLUS

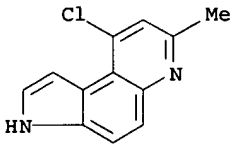
10080926

DN 133:171758
TI Pyrrolo-quinoline derivatives as potential antineoplastic drugs
AU Ferlin, M. G.; Gatto, B.; Chiarelotto, G.; Palumbo, M.
CS Department of Pharmaceutical Sciences, University of Padova, Padua, 35131, Italy
SO Bioorganic & Medicinal Chemistry (2000), 8(6), 1415-1422
CODEN: BMECEP; ISSN: 0968-0896
PB Elsevier Science Ltd.
DT Journal
LA English
AB Some novel pyrrolo-quinoline derivs. have been synthesized as potential antineoplastic agents. They contain an angular arom. tricyclic or tetracyclic system, to which the methanesulfon-anisidine side chain typical of amsacrine as such, or lacking the m-methoxy substituent, is connected. A Me group can be present at position 7 of the pyrrolo-quinoline ring. The novel compds. exhibit interesting cell growth inhibitory properties when tested against the NCI panel of cell lines, in particular those obtained from solid tumors like CNS-, melanoma- and prostate-derived cells. The mechanism of cytotoxic action does not seem to be related to topoisomerase II poisoning ability. Most active proved to be compd. 4a, which lacks both Me and methoxy substituents, followed by 5a, having the methoxy group only. Biol. activity is less pronounced in the tetracyclic family of derivs. 6 and 7.
IT **288570-10-5P 288570-11-6P 288570-12-7P**
288570-13-8P 288570-14-9P 288570-15-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(pyrrolo-quinoline derivs. as potential antineoplastic drugs)
RN 288570-10-5 CAPLUS
CN 3H-Pyrrolo[3,2-f]quinoline, 9-chloro- (9CI) (CA INDEX NAME)



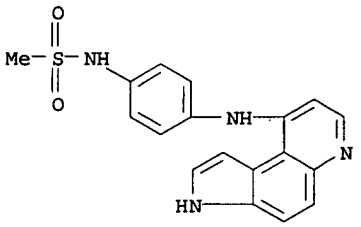
102

RN 288570-11-6 CAPLUS
CN 3H-Pyrrolo[3,2-f]quinoline, 9-chloro-7-methyl- (9CI) (CA INDEX NAME)



102

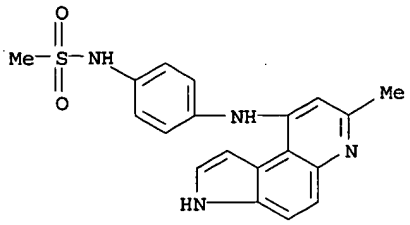
RN 288570-12-7 CAPLUS
CN Methanesulfonamide, N-[4-(3H-pyrrolo[3,2-f]quinolin-9-ylamino)phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)



HCl

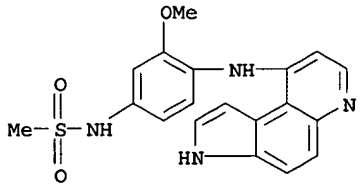
102

RN 288570-13-8 CAPLUS
CN Methanesulfonamide, N-[4-[(7-methyl-3H-pyrrolo[3,2-f]quinolin-9-yl)amino]phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)



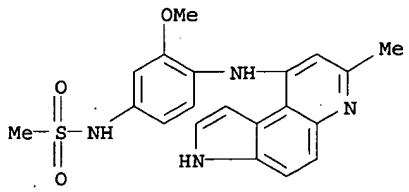
● HCl

RN 288570-14-9 CAPLUS
CN Methanesulfonamide, N-[3-methoxy-4-(3H-pyrrolo[3,2-f]quinolin-9-ylamino)phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 288570-15-0 CAPLUS
CN Methanesulfonamide, N-[3-methoxy-4-[(7-methyl-3H-pyrrolo[3,2-f]quinolin-9-yl)amino]phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2003 ACS
AN 1999:736646 CAPLUS
DN 131:336827
TI Novel substituted cyclic compounds, particularly N-[2-(1-naphthyl)ethyl]acetamides and analogs with melatonin receptor activity, preparation method, and pharmaceutical compositions containing them
IN Lesieur, Daniel; Klupsch, Frederique; Guillaumet, Gerald; Viaud, Marie-Claude; Langlois, Michel; Bennejean, Caroline; Renard, Pierre; Delagrange, Philippe
PA Adir Et Compagnie, Fr.
SO PCT Int. Appl., 167 pp.
CODEN: PIXXD2
DT Patent
LA French
FAN.CNT 2

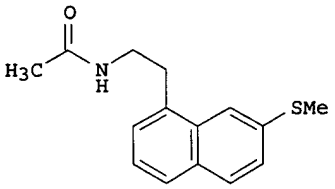
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9958495	A1	19991118	WO 1999-FR1100	19990510

W: AU, BR, CA, CN, HU, JP, NO, NZ, PL, US, ZA

	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	FR 2778662	A1	19991119	FR 1998-5957	19980512
	FR 2778662	B1	20000616		
	CA 2331870	AA	19991118	CA 1999-2331870	19990510
	AU 9936103	A1	19991129	AU 1999-36103	19990510
	AU 748567	B2	20020606		
	EP 1077927	A1	20010228	EP 1999-918036	19990510
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
	BR 9911771	A	20011002	BR 1999-11771	19990510
	JP 2002514619	T2	20020521	JP 2000-548299	19990510
	NZ 507691	A	20020531	NZ 1999-507691	19990510
	NO 2000005714	A	20001113	NO 2000-5714	20001113
PRAI	FR 1998-5957	A	19980512		
	WO 1999-FR1100	W	19990510		

OS MARPAT 131:336827

GI



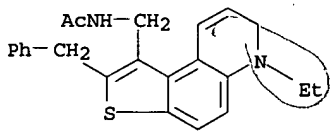
II

AB The invention concerns compds. of formula R-A-R' [I; wherein: A = various bi- and tricyclic carbo- and heterocyclic systems; R = SH and various derivs. such as thioethers, sulfoxides, and sulfones, (un)substituted amino, or may form ring with A; R' = (CH2)nR2 where n = 0-4 and R2 = various amide-contg. groups] and their stereoisomers and salts. The compds. are ligands of melatonin receptors, and are useful for prepg. medicines for treating a variety of melatonin-related conditions, such as seasonal depression, anxiety, sleep and eating disorders, etc. For instance, title compd. II was prepd. in 7 steps: (1) acylation of thioanisole with succinic anhydride to give 4-[4-(methylthio)phenyl]-4-oxobutanoic acid; (2) redn. of oxo with Et3SiH; (3) cyclization to form a 1-naphthalenone; (4) Wittig reaction with di-Et cyanomethylphosphonate; (5) dehydrogenation with sulfur at 230.degree.; (6) redn. of the nitrile with BH3.THF; and (7) N-acetylation of the resulting amine with AcCl. Compds. I showed little or no oral toxicity in mice, and bound strongly to mt1 and MT2 receptors in vitro, with IC50 values .ltoreq. 10 .mu.M. The compds. also showed circadian rhythm, anxiolytic, and vasoconstrictor/vasodilator activities in rats or in vitro.

IT **250162-28-8P**, N-[(2-Benzyl-6-ethyl-6,7-dihydrothieno[3,2-f]quinolin-1-yl)methyl]acetamide
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(target compd.; prepn. of bicyclic arom. and heteroarom. compds. as melatonin receptor ligands)

RN 250162-28-8 CAPLUS

CN Acetamide, N-[[6-ethyl-6,7-dihydro-2-(phenylmethyl)thieno[3,2-f]quinolin-1-yl]methyl]- (9CI) (CA INDEX NAME)



RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2003 ACS

AN 1999:222914 CAPLUS

DN 130:267341

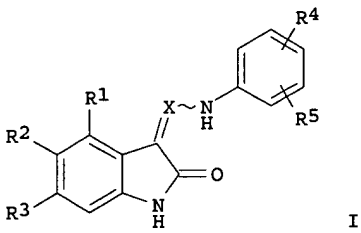
TI Preparation of oxindoles as protein tyrosine kinase and protein serine/threonine kinase inhibitors.

10080926

IN Davis, Stephen Thomas; Dickerson, Scott Howard; Frye, Stephen Vernon; Harris, Philip Anthony; Hunter, Robert Neil, III; Kuyper, Lee Frederick; Lackey, Karey Elizabeth; Luzzio, Michael Joseph; Veal, James Marvin; Walker, Duncan Herrick
PA Glaxo Group Limited, UK
SO PCT Int. Appl., 133 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9915500	A1	19990401	WO 1998-EP5559	19980903
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2302572	AA	19990401	CA 1998-2302572	19980903
AU 9897407	A1	19990412	AU 1998-97407	19980903
AU 747506	B2	20020516		
ZA 9808078	A	20000322	ZA 1998-8078	19980903
EP 1009738	A1	20000621	EP 1998-951342	19980903
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 9812048	A	20000926	BR 1998-12048	19980903
EE 200000117	A	20001215	EE 2000-200000117	19980903
JP 2001517652	T2	20011009	JP 2000-512809	19980903
US 6369086	B1	20020409	US 1999-262351	19990304
MX 200002254	A	20001030	MX 2000-2254	20000303
US 6387919	B1	20020514	US 2000-486960	20000606
US 2003004351	A1	20030102	US 2001-924431	20010808
US 6541503	B2	20030401		
US 2003069430	A1	20030410	US 2001-999331	20011130
PRAI GB 1997-18913	A	19970905		
WO 1998-EP5559	W	19980903		
US 1999-262351	A3	19990304		
US 2000-486960	A3	20000606		

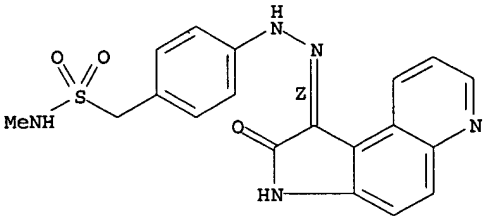
OS MARPAT 130:267341
GI



I

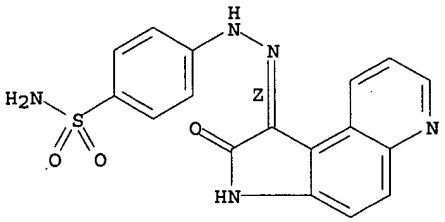
AB Title compds. [I; X = N, CH, CCF3, CA; A = aliphatyl; R1 = H, SH, OH, HOA, heterocyclyl, AHN, A2N, A2NCO, halo, cyano, NO2, etc.; R2 = H, A, HONA, alkoxy, HOA, heterocyclyl, A2NSO2, halo, NO2, OH, ASO2, etc.; R3 = H, A, OH, HOA, A2N, aryl, aryloxy, hydroxyaryl, heterocyclyl, hydroxyheterocyclyl, etc.; R4 = SO3H, SO2A, A2N, A2NCO, heterocyclylamino, heterocyclylsulfonyl, etc.; R5 = H; R1R2, R4R5 = fused ring], were prepd. Thus, (Z)-N-(3-hydroxy-2,2-dimethylpropyl)-4-[(7-oxo-6,7-dihydro-1-thia-3,6-diaza-as-indacen-8-ylidenemethyl)amino]benzenesulfonamide [prepd. from 8-ethoxymethylene-6,8-dihydro-1-thia-3,6-diaza-as-indacen-7-one and 4-amino-N-(3-hydroxy-2,2-dimethylpropyl)benzenesulfonamide] inhibited protein kinases CDK1, CDK2, and UL97 with IC50 = 1-10 nM.
IT **222035-64-5P 222036-09-1P 222037-12-9P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of oxindoles as protein tyrosine kinase and protein serine/threonine kinase inhibitors)
RN 222035-64-5 CAPLUS
CN Benzenemethanesulfonamide, 4-[(2Z)-(2,3-dihydro-2-oxo-1H-pyrrolo[3,2-f]quinolin-1-ylidene)hydrazino]-N-methyl- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

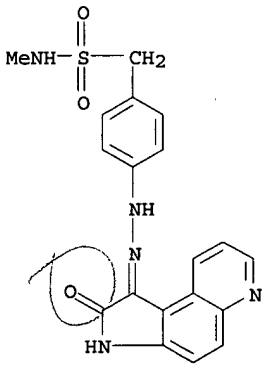


RN 222036-09-1 CAPLUS
CN Benzenesulfonamide, 4-[(2Z)-(2,3-dihydro-2-oxo-1H-pyrrolo[3,2-f]quinolin-1-ylidene)hydrazino]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 222037-12-9 CAPLUS
CN Benzenemethanesulfonamide, 4-[(2,3-dihydro-2-oxo-1H-pyrrolo[3,2-f]quinolin-1-ylidene)hydrazino]-N-methyl- (9CI) (CA INDEX NAME)



RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

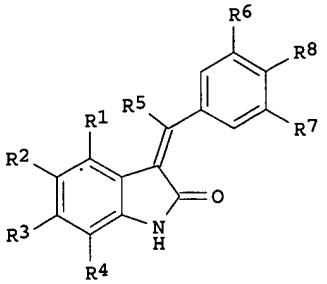
L13 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2003 ACS
AN 1999:166598 CAPLUS
DN 130:209599
TI Preparation of benzylidene-1,3-dihydroindol-2-ones as receptor tyrosine kinase inhibitors.
IN McNutt, Robert Walton, Jr.; Jung, David Kendall; Harris, Philip Anthony; Hunter, Robert Neil, III; Veal, James Marvin; Dickerson, Scott; Lackey, Karen Elizabeth; Peel, Michael Robert
PA Glaxo Group Limited, UK
SO PCT Int. Appl., 144 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9910325	A1	19990304	WO 1998-EP4844	19980804
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG,				

KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9891584		A1	19990316	AU 1998-91584	19980804
EP 1003721		A1	20000531	EP 1998-943832	19980804
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002514228		T2	20020514	JP 1999-513839	19980804
ZA 9807037		A	20000207	ZA 1998-7037	19980805
US 6268391		B1	20010731	US 2000-446586	20000407
PRAI GB 1997-16557		A	19970806		
WO 1998-EP4844		W	19980804		

OS MARPAT 130:209599
GI

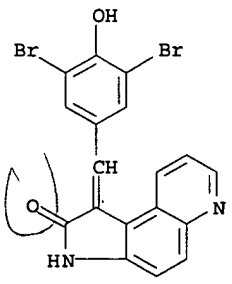


I

AB Title compds. [I; R1 = H; R1R2 = fused 5-10 membered aryl, heteroaryl, heterocyclyl; R2, R3 = H, HET, aryl, aliphatyl, cyano, NO2, halo, R10, OR10, SR10, SOR10, SO2R10, NR10R11, etc.; R4 = H, halo, NO2, cyano; R5 = H, (substituted) aliphatyl; R6, R7 = halo, cyano, NO2, CONR10R11, SO2NR10R11, NR10R11, OR11; R8 = OH, NHSO2R12, NHCOCF3; R10 = H, halo, (substituted) aliphatyl, aryl, HET; R11 = H, R10; R12 = H, (substituted) aliphatyl, HET; HET = benzofuryl, benzoxazolyl, dioxanyl, dithianyl, dithiazinyl, furyl, imidazolyl, indolyl, indazolyl, morpholinyl, tetrazolyl, pyrrolyl, quinolinyl, triazinyl, tetrahydrofuryl, etc.], were prepd. for treatment of tumor growth, preventing organ transplant rejection, healing chronic wounds, etc. (no data). Thus, 5-(2-methylthiazol-4-yl)-1,3-dihydroindol-2-one hydrochloride (prepn. given) was stirred with 3,5-dibromo-4-hydroxybenzaldehyde in AcOH/aq. HCl to give 64% 3-(3,5-dibromo-4-hydroxybenzylidene)-5-(2-methylthiazol-4-yl)-1,3-dihydroindol-2-one.

IT **220904-76-7P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of benzylidene-1,3-dihydroindol-2-ones as receptor tyrosine kinase inhibitors.)

RN 220904-76-7 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1-[(3,5-dibromo-4-hydroxyphenyl)methylene]-1,3-dihydro- (9CI) (CA INDEX NAME)



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

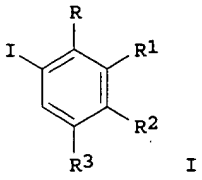
L13 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2003 ACS

10080926

AN 1998:682353 CAPLUS
DN 129:302450
TI Preparation of iodobenzamides as antineoplastic and antiviral agents
IN Yatscoff, Randall W.; Foster, Robert T.; Naicker, Selvaraj
PA Isotechnika, Inc., Can.
SO PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9845253	A1	19981015	WO 1998-IB768	19980410
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9870742	A1	19981030	AU 1998-70742	19980410
EP 973727	A2	20000126	EP 1998-917555	19980410
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001521510	T2	20011106	JP 1998-542547	19980410
US 6225323	B1	20010501	US 1998-125173	19980811
US 6306871	B1	20011023	US 2000-665654	20000919
PRAI US 1997-43360P	P	19970410		
US 1998-43360P	A	19980410		
WO 1998-IB768	W	19980410		
US 1998-125173	A1	19980811		

OS MARPAT 129:302450
GI

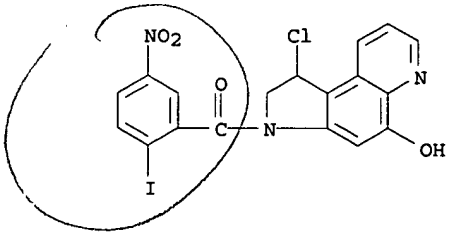


I

AB Title compds. [I; R = CONY (sic) wherein Y is a chelatings groups selected from the group of aliph., arom., heterocyclic, carbohydrate groups, and where Y and N together form a heterocyclic ring (sic); R1 = NO2 or NH2; R2,R3 = H, NO2, NH2;when R2 = NH2 R1 and R3 = H] having a chelating group, a thiol trapping group, and an activating group. The presumptive mechanism of action in preventing cancer cell and virus replication is through inhibition of the binding of transcription factors to Zn finger binding domains. Thus, I (R1 = R3 = H, R2 = NO2)(II; R = CO2H) was amidated by H2NCH2CH2NMe2 to give II (R = CONHCH2CH2NMe2). Data for biol. activity of I were given.

IT **214556-50-0P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of iodobenzamides as antineoplastic and antiviral agents)

RN 214556-50-0 CAPLUS
CN 1H-Pyrrolo[3,2-f]quinolin-5-ol, 1-chloro-2,3-dihydro-3-(2-iodo-5-nitrobenzoyl)- (9CI) (CA INDEX NAME)



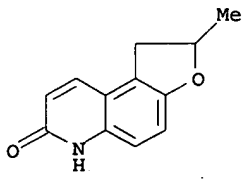
10080926

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2003 ACS
AN 1994:534101 CAPLUS
DN 121:134101
TI Preparation of quinoline derivative or salt thereof and remedy for cardiac diseases containing the same
IN Kyotani, Yoshinori; Ogiya, Tadaaki; Toma, Tsutomu; Kurihara, Yuji; Kitamura, Takahiro; Yamaguchi, Takashi; Onogi, Kazuhiro; Sato, Seichi; Shigyo, Hiromichi; et al.
PA Kowa Co., Ltd., Japan
SO PCT Int. Appl., 265 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

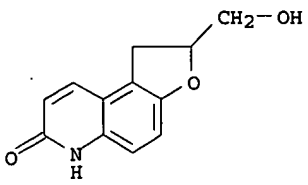
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9322317	A1	19931111	WO 1993-JP566	19930428
	W: CA, JP, KR, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 638571	A1	19950215	EP 1993-911951	19930428
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	JP 3406600	B2	20030512	JP 1993-519131	19930428
	US 5576324	A	19961119	US 1994-325270	19941027
PRAI	JP 1992-112862	A	19920501		
	WO 1993-JP566	W	19930428		

OS MARPAT 121:134101
GI For diagram(s), see printed CA Issue.
AB Quinoline derivs. [I; ring A = a furan, dihydrofuran or dioxolane ring; R1 = OH, CO2H, alkoxycarbonyl, CONH2, alkenyl, CHO, cyano, (un)substituted alkyl, C(:NR10)R9; R9 = NH2, alkyl; R10 = H, OH; R2 = H, (un)substituted alkyl, alkenyl, acyl, OH; R3, R4 = H, halo, (un)substituted alkyl or NH2, alkoxy, alkylthio, CO2H, alkoxycarbonyl, acyl, CONH2, cyano, NO2; R5, R6, R7, R8 = H or alkyl; m = an integer 0-3; symbol.....means that there may be a double bond formed by R6 and R8] and medicinally acceptable salts are prepd. The compds. I have a pos. inotropic effect on myocardia and an antiarrhythmic effect and can dilate blood vessels without extremely increasing the heart rate. Therefore, a remedy for cardiac diseases contg. I as the active ingredient is remarkably useful for treating cardiac insufficiency and arrhythmia and as vasodilators and carditonics. Thus, 5-hydroxy-6-allyl-8-methylcarbostyryl was stirred with m-chloroperbenzoic acid in CHCl3 at 50.degree. for 17 h to give a tetrahydrofuroquinolinone deriv. (II; X = OH, R9 = H) which was mesylated by MeSO2Cl in pyridine and underwent azidolysis with NaN3 DMF at 100.degree. to give, after hydrogenation over 10% Pd-C, II (X = NH2, R11 = H). II.HCl (X = NH2, R11 = Me) at 100 mg/kg p.o. inhibited the CHCl3-induced arrhythmia in mice by 100%.
IT **156934-75-7P 156934-76-8P 156934-77-9P**
156934-78-0P 156934-79-1P 156935-57-8P
156935-58-9P 156935-59-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of, as medicament for cardiac diseases)
RN 156934-75-7 CAPLUS
CN Furo[3,2-f]quinolin-7(6H)-one, 1,2-dihydro-2-methyl- (9CI) (CA INDEX NAME)

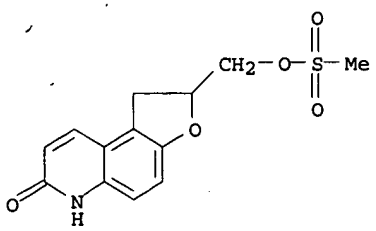


162

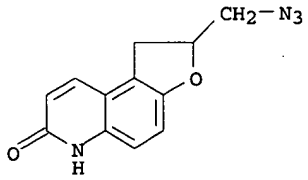
RN 156934-76-8 CAPLUS
CN Furo[3,2-f]quinolin-7(6H)-one, 1,2-dihydro-2-(hydroxymethyl)- (9CI) (CA INDEX NAME)



RN 156934-77-9 CAPLUS
CN Furo[3,2-f]quinolin-7(6H)-one, 1,2-dihydro-2-[[(methylsulfonyl)oxy]methyl]- (9CI) (CA INDEX NAME)

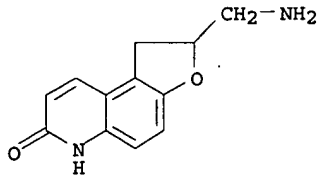


RN 156934-78-0 CAPLUS
CN Furo[3,2-f]quinolin-7(6H)-one, 2-(azidomethyl)-1,2-dihydro- (9CI) (CA INDEX NAME)

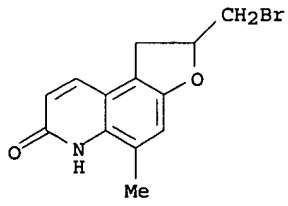


RN 156934-79-1 CAPLUS
CN Furo[3,2-f]quinolin-7(6H)-one, 2-(aminomethyl)-1,2-dihydro- (9CI) (CA INDEX NAME)

alkyl substituted

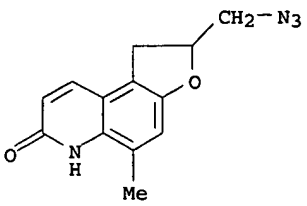


RN 156935-57-8 CAPLUS
CN Furo[3,2-f]quinolin-7(6H)-one, 2-(bromomethyl)-1,2-dihydro-5-methyl- (9CI) (CA INDEX NAME)

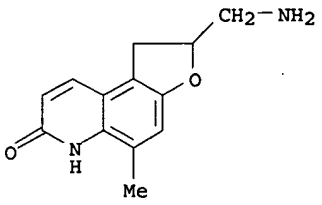


RN 156935-58-9 CAPLUS
CN Furo[3,2-f]quinolin-7(6H)-one, 2-(azidomethyl)-1,2-dihydro-5-methyl- (9CI) (CA INDEX NAME)

10080926



RN 156935-59-0 CAPLUS
CN Furo[3,2-f]quinolin-7(6H)-one, 2-(aminomethyl)-1,2-dihydro-5-methyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

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L2             4 S L1

     FILE 'STNGUIDE' ENTERED AT 18:48:12 ON 03 JUN 2003

     FILE 'REGISTRY' ENTERED AT 18:48:59 ON 03 JUN 2003
L3               STRUCTURE UPLOADED
L4             2 S L3

     FILE 'STNGUIDE' ENTERED AT 18:50:17 ON 03 JUN 2003

     FILE 'REGISTRY' ENTERED AT 18:52:33 ON 03 JUN 2003
L5               STRUCTURE UPLOADED
L6             9 S L5

     FILE 'STNGUIDE' ENTERED AT 18:53:30 ON 03 JUN 2003

     FILE 'STNGUIDE' ENTERED AT 18:57:42 ON 03 JUN 2003

     FILE 'REGISTRY' ENTERED AT 18:57:50 ON 03 JUN 2003
L7               STRUCTURE UPLOADED
L8             8 S L7

     FILE 'STNGUIDE' ENTERED AT 19:01:11 ON 03 JUN 2003

     FILE 'REGISTRY' ENTERED AT 19:04:54 ON 03 JUN 2003
L9               STRUCTURE UPLOADED
L10            7 S L9
L11          372 S L9 SSS FULL

     FILE 'CAPLUS' ENTERED AT 19:06:03 ON 03 JUN 2003
L12           78 S L11
L13           10 S L11/THU

=> s l12 not l13
L14          68 L12 NOT L13

=> s l14 and patent/dt
       4107461 PATENT/DT
L15          11 L14 AND PATENT/DT
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=> d 1-11 bib abs hitstr

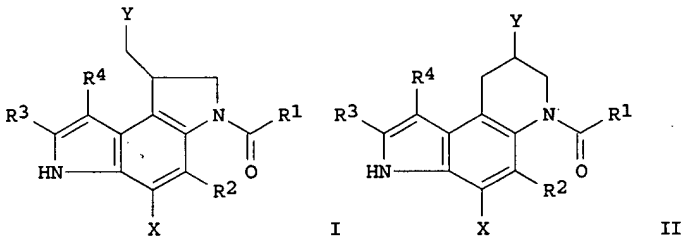
L15 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2003 ACS
AN 2002:676012 CAPLUS
DN 137:216935
TI Preparation of pyrroloindoles and pyrroloquinolines as prodrugs for tumor treatment
IN Searcey, Mark; Patterson, Laurence Hylton
PA School of Pharmacy, University of London, UK
SO PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

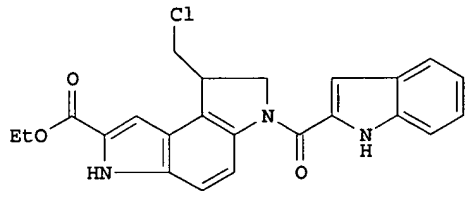
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002068412	A1	20020906	WO 2002-GB796	20020222

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI EP 2001-301636 A 20010222
OS MARPAT 137:216935
GI





III

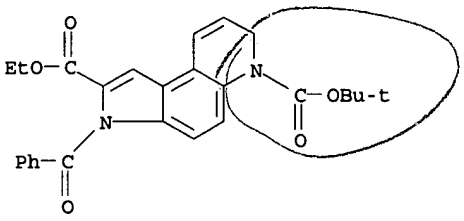
AB Title compds. I and II [wherein X = H; Y = leaving group; R1 = Ar, NH2, R8, or OR8; R2 and R4 = independently H, alkyl, OH, alkoxy, CN, Cl, Br, I, NO2, NH2, NHCOR9, CO2H, CONHR9, NHCO2R9, CO2R9, and COAr1; R3 = H, alkyl, OH, alkoxy, CN, Cl, Br, I, NO2, NH2, NHCOR9, CO2H, CONHR9, NHCO2R9, or CO2R9; R8 and R9 = independently alkyl or (un)substituted (hetero)aryl and ligands; Ar = (un)substituted specified (hetero)aryl, (hetero)cyclyl, or phenylethenyl; Ar1 = Ar with provisos] were prepd. as prodrug analogs of duocarmycin. For example, Et 5-nitroindole-2-carboxylate was protected with benzoyl chloride (87%) and the product hydrogenated with 10% Pd/C to give Et 5-amino-1-benzoylindole-2-carboxylate (40%). Iodation with N-iodosuccinimide (51%), BOC-protection (90%) of the amine, and addn. of 1,3-dichloropropene (94%) afforded the 5-[N-BOC-N-(3-chloro-2-propen-1-yl)amino]-4-iodoindole. Cyclization with Bu3SnH in the presence of AIBN in toluene (78%), followed by addn. of 5-methoxyindole-2-carboxylic acid (86%) produced III. The latter exhibited an activity factor, i.e. the ratio of IC50 cytotoxicity values obtained for pos. and neg. activation of CHO cells, of 71.7. Cytochrome P 450, which is expressed at high levels in tumors, is expected to hydroxylate I and II at the C atom to which X is joined. Thus, the prodrug is expected to be activated preferentially in

tumor cells, where it will act as a DNA alkylating agent preventing cell division.

IT **454691-89-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; prepn. of pyrroloindoles and pyrroloquinolines as duocarmycin prodrugs for tumor treatment)

RN 454691-89-5 CAPLUS

CN 6H-Pyrrolo[3,2-f]quinoline-2,6-dicarboxylic acid, 3-benzoyl-3,7-dihydro-, 6-(1,1-dimethylethyl) 2-ethyl ester (9CI) (CA INDEX NAME)



RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2003 ACS

AN 2001:564157 CAPLUS

DN 135:159969

TI 1, 2-Dithiophene-yl-ethylene organic electroluminescent component

IN Higuchi, Shoji; Sakaki, Yuichi; Yoshida, Tamotsu; Nagasaki, Yoshinori; Tanaka, Kazuhiko

PA Toppan Printing Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 20 pp.
CODEN: JKXXAF

DT Patent

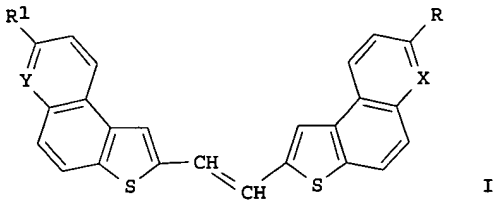
LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2001210472	A2	20010803	JP 2000-17332	20000126
PRAI JP 2000-17332		20000126		

OS MARPAT 135:159969

GI



I

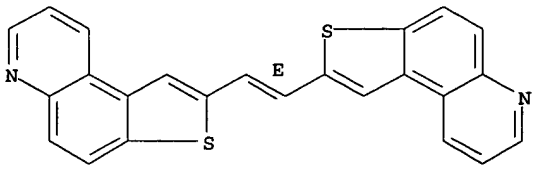
AB The invention refers to an org. electroluminescent component comprising 1,2 -dithiophene-yl-ethylene I [X,Y = C, or N; R,R1 = H, alkyl, alkoxy, tris-alkyl-siloxy or tris-alkyl-siloxy methyl].

IT **342807-14-1P 342807-16-3P**
RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(1, 2-dithiophene-yl-ethylene org. electroluminescent component)

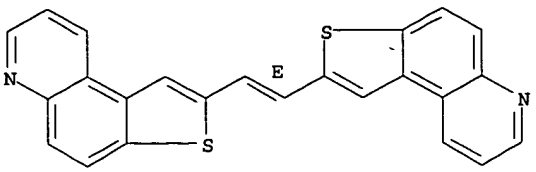
RN 342807-14-1 CAPLUS

CN Thieno[3,2-f]quinoline, 2,2'-(1E)-1,2-ethenediylbis- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

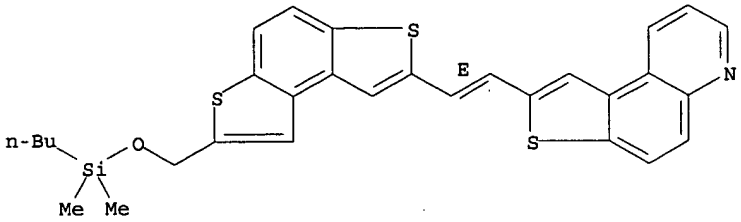


10080926

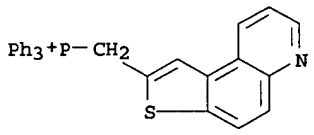


RN 342807-16-3 CAPLUS
CN Thieno[3,2-f]quinoline, 2-[(1E)-2-[7-[[(butyldimethylsilyl)oxy]methyl]benz o[1,2-b:4,3-b']dithien-2-yl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

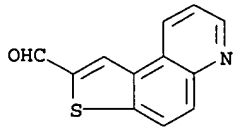


IT **182631-27-2 190512-41-5**, Thieno[3,2-f]quinoline-2-carboxaldehyde
RL: RCT (Reactant); RACT (Reactant or reagent)
(1, 2-dithiophene-yl-ethylene org. electroluminescent component)
RN 182631-27-2 CAPLUS
CN Phosphonium, triphenyl(thieno[3,2-f]quinolin-2-ylmethyl)-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

RN 190512-41-5 CAPLUS
CN Thieno[3,2-f]quinoline-2-carboxaldehyde (9CI) (CA INDEX NAME)



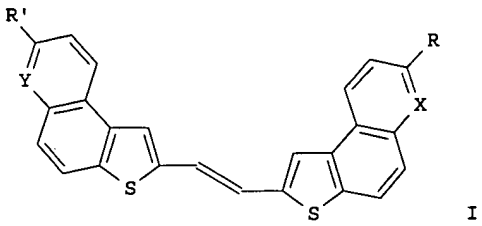
L15 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2003 ACS
AN 2001:403451 CAPLUS
DN 135:19545
TI Preparation of 1,2-dithiophenylethylene as blue organic electroluminescent materials
IN Higuchi, Shoji; Tanaka, Kazuhiko; Sakaki, Yuichi; Yoshida, Tamotsu; Nagasaki, Yoshinori
PA Toppan Printing Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 17 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2001151781	A2	20010605	JP 1999-335039	19991125
PRAI JP 1999-335039		19991125		

not prior art

10080926

OS MARPAT 135:19545
GI

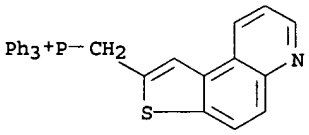


I

AB Title compds. I (X, Y = CH, N; R, R' = H, alkyl, alkoxy, trisalkylsiloxymethyl) are prepd. 6-(Tert-butyldimethylsiloxy)naphtho[2,1-b]thiophene-2-carbaldehyde was reacted with 2-naphtho[2,1-b]thienylmethyltriphenylphosphonium chloride in the presence of tert-BuOK in MeOH at 0.degree. overnight to give 90% 2-[6'-(tert-butyldimethylsiloxy)naphtho[2,1-b]thiophen-2'-ylethenyl]naphtho[2,1-b]thiophene showing strong blue fluorescence at peak wavelength 435 nm and 462 nm in PhMe.

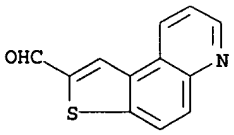
IT **182631-27-2P 190512-41-5P**, Thieno[3,2-f]quinoline-2-carboxaldehyde **342807-16-3P**
RL: PNU (Preparation, unclassified); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of dithiophenylethylene as blue org. electroluminescent materials)

RN 182631-27-2 CAPLUS
CN Phosphonium, triphenyl(thieno[3,2-f]quinolin-2-ylmethyl)-, chloride (9CI) (CA INDEX NAME)



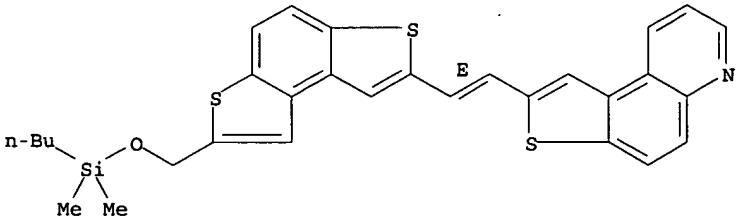
● Cl⁻

RN 190512-41-5 CAPLUS
CN Thieno[3,2-f]quinoline-2-carboxaldehyde (9CI) (CA INDEX NAME)



RN 342807-16-3 CAPLUS
CN Thieno[3,2-f]quinoline, 2-[(1E)-2-[7-[[(butyldimethylsilyl)oxy]methyl]benzo[1,2-b:4,3-b']dithien-2-yl]ethenyl]- (9CI) (CA INDEX NAME)

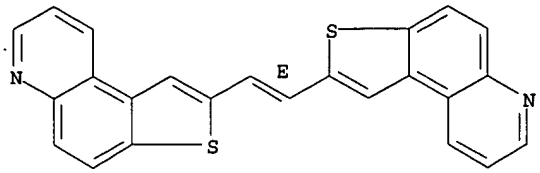
Double bond geometry as shown.



10080926

IT **342807-14-1P**
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(prepn. of dithiophenylethylene as blue org. electroluminescent materials)
RN 342807-14-1 CAPLUS
CN Thieno[3,2-f]quinoline, 2,2'-(1E)-1,2-ethenediylbis- (9CI) (CA INDEX NAME)

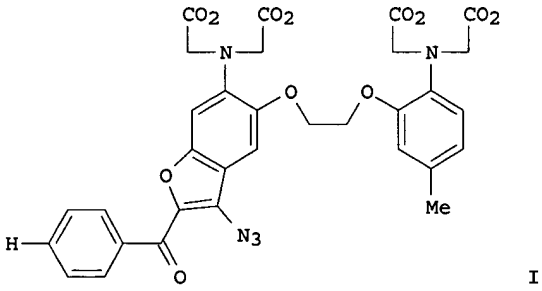
Double bond geometry as shown.



L15 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2003 ACS
AN 2001:73457 CAPLUS
DN 134:128209
TI Light-triggered indicators that memorize analyte concentrations
IN Tsien, Roger Y.; Adams, Stephen R.
PA The Regents of the University of California, USA
SO U.S., 18 pp.
CODEN: USXXAM
DT **Patent**
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6180411	B1	20010130	US 1998-134668	19980730

PRAI US 1997-54441P P 19970801
OS MARPAT 134:128209
GI

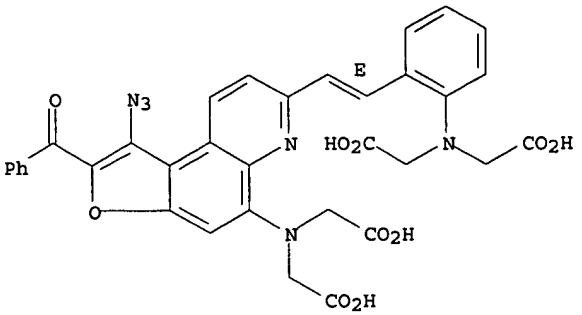


I

AB A new class of optical indicators which are capable of memorizing and preserving the spatial localization of intracellular analytes in a time resolved manner is described. The compds. comprise a chromophore carrying a photolabile group capable of undergoing an irreversible and detectable chem. transformation upon irradn. by light. The chromophore is linked to a binding site capable of binding an analyte, wherein binding of the analyte to the binding site alters an optical property of the chromophore, thus altering the ability of the photolabile group to undergo the chem. transformation. Methods and kits for memorizing the spatial localization of the analytes are also described. A memory indicator for Ca2+, I, was prepd. and tested.

IT **321939-03-1D**, compds.
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(as memory indicator for hydrogen ion; light-triggered indicators that memorize analyte concns.)
RN 321939-03-1 CAPLUS
CN Glycine, N-[2-[(1E)-2-[1-azido-2-benzoyl-5-[bis(carboxymethyl)amino]furo[3,2-f]quinolin-7-yl]ethenyl]phenyl]-N-(carboxymethyl)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

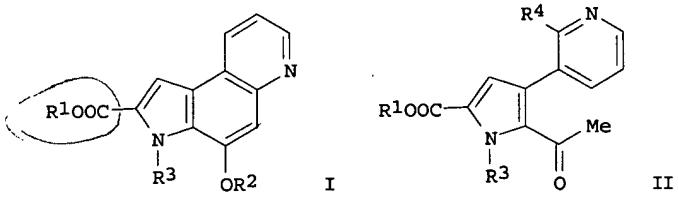


RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2003 ACS
AN 1997:754358 CAPLUS
DN 128:61380
TI Preparation of pyrroloquinolines as intermediates for duocarmycin SA
IN Natsume, Mitsutaka; Muratake, Hideaki
PA Shionogi and Co., Ltd., Japan; Otsu, Kenkyusho
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 09301975	A2	19971125	JP 1996-116052	19960510
PRAI	JP 1996-116052		19960510		

OS CASREACT 128:61380; MARPAT 128:61380
GI



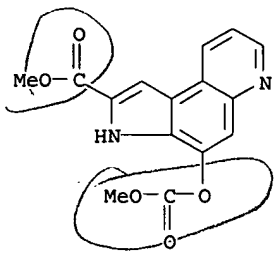
I II

AB Pyrroloquinolines I (R1 = H, lower alkyl; R2 = OH-protecting group; R3 = H, lower alkyl, amino-protecting group) are prepd. by intramol. cyclization of II (R1, R3 = same as above; R4 = halo, F3CSO3) using org. metal catalysts followed by protection of OH groups of I (R1, R3 = same as above; R2 = H). II (R1 = Me, R3 = H, R4 = F3CSO3) (prepn. given) was etherified with F3CSO3SiMe2Bu-t and Et3N in CH2Cl2 at 0.degree. for 1 h, cyclocondensed in the presence of Bu3SnF, (Ph3P)2PdCl2, and LiCl in xylene under reflux for 1 h, and protected with ClCO2H in pyridine at 20.degree. for 3 h to give 89% I (R1 = Me, R2 = MeOCO, R3 = H) (III). Me (7bR*,8aS*)-1,2,4,5,8,8a-hexahydro-4-oxocyclopropa[c]pyrrolo[3,2-e]indole-6-carboxylate (prepd. from III via several steps) was treated with 2-(imidazol-1-yl-carbonyl)-5,6,7-trimethoxyindole in the presence of NaH in THF/HCONMe2 at 0.degree. for 4 h to give 60% duocarmycin SA.

IT **182180-61-6P**
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of pyrroloquinolines by intramol. cyclization of acetylpyridinylpyrrole using org metal catalysts)

RN 182180-61-6 CAPLUS
CN 3H-Pyrrolo[3,2-f]quinoline-2-carboxylic acid, 4-[(methoxycarbonyl)oxy]-, methyl ester (9CI) (CA INDEX NAME)

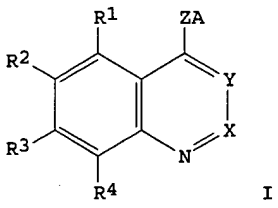
10080926



L15 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2003 ACS
AN 1990:35883 CAPLUS
DN 112:35883
TI Quinoline, quinazoline, and cinnoline fungicides and their preparation
IN Arnold, Wendell Ray; Coghlan, Michael Joseph; Krumkalns, Eriks Victor; Jourdan, Glen Phil; Suhr, Robert George
PA Lilly, Eli, and Co., USA
SO Eur. Pat. Appl., 60 pp.
CODEN: EPXXDW
DT **Patent**
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 326330	A2	19890802	EP 1989-300658	19890125
	EP 326330	A3	19900822		
	EP 326330	B1	20020724		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	IL 89029	A1	19930131	IL 1989-89029	19890123
	AU 8928728	A1	19890803	AU 1989-28728	19890124
	AU 626279	B2	19920730		
	AT 221051	E	20020815	AT 1989-300658	19890125
	ES 2176173	T3	20021201	ES 1989-300658	19890125
	ZA 8900626	A	19891227	ZA 1989-626	19890126
	CA 1340470	A1	19990330	CA 1989-589263	19890126
	FI 8900423	A	19890730	FI 1989-423	19890127
	FI 94523	B	19950615		
	FI 94523	C	19950925		
	CN 1034925	A	19890823	CN 1989-100472	19890127
	CN 1031263	B	19960313		
	DK 8900365	A	19890915	DK 1989-365	19890127
	BR 8900356	A	19890919	BR 1989-356	19890127
	JP 01246263	A2	19891002	JP 1989-19400	19890127
	JP 2559485	B2	19961204		
	HU 49790	A2	19891128	HU 1989-426	19890127
	HU 208611	B	19931228		
	KR 9710174	B1	19970621	KR 1989-872	19890127
	US 5145843	A	19920908	US 1989-334422	19890407
	US 5240940	A	19930831	US 1992-881957	19920512
PRAI	US 1988-150266	A	19880129		
	US 1989-334422	A3	19890407		

GI

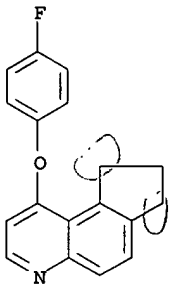


I

AB The title compds. [I; X = CR5, N; R5 = H, Cl, Me; Y = CR10 if X = N, Y = CR10 or N if X = CR5; R10 = H, Cl, Br; Z = O, S, SO, SO2, etc.; R1-R4 = H, OH, NO2, halo, C1-4 alkyl, etc.; R1R2 or R2R3 can form a carbocyclic ring; A = C1-18 (un)satd. (un)substituted hydrocarbon chain optionally including a heteroatom), C3-8 cycloalkyl, cycloalkenyl, etc.] were prepd. as agrochem. fungicides. A mixt. of 4,7-dichloroquinoline and 4-FC6H4OH in xylene was refluxed 17 h at 144.degree., addnl. 4-FC6H4OH was added and

refluxing was continued to give 73.2% 7-chloro-4-(4-fluorophenoxy)quinoline (II). II at 100 ppm gave 90-100% control of Erysiphe graminis tritici.

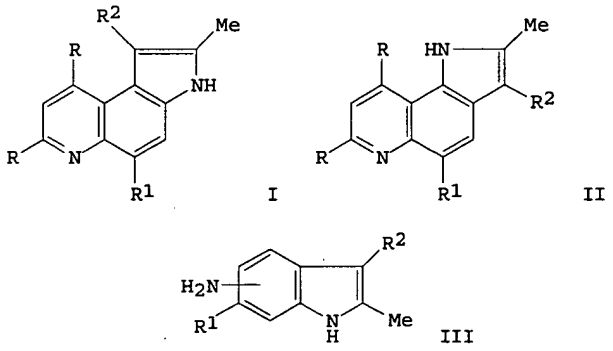
IT **124496-59-9P**
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of, as agrochem. fungicide)
RN 124496-59-9 CAPLUS
CN 7H-Cyclopenta[f]quinoline, 1-(4-fluorophenoxy)-8,9-dihydro- (9CI) (CA INDEX NAME)



L15 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2003 ACS
AN 1977:405939 CAPLUS
DN 87:5939
TI Pyrroloquinoline derivatives
IN Kost, A. N.; Yudin, L. G.; Yamashkin, S. A.
PA Moscow State University, USSR
SO U.S.S.R.
From: Otkrytiya, Izobret., Prom. Obraztsy, Tovarnye Znaki 1977, 54(8), 95.
CODEN: URXXAF
DT **Patent**
LA Russian
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
SU 548608	T	19770228	SU 1975-2157204	19750716

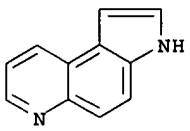
PRAI SU 1975-2157204 19750716
GI



AB Pyrrolo[4,5-f]quinolines I (R = Me, Ph; R1, R2 = H, Me), pyrrolo[5,4-f]quinolines II, pyrrolo[4,5-g]quinolines, and pyrrolo[5,4-g]quinolines were prepd. by treatment of 5- or 6-aminoindoles III with .beta.-diketones (RCO)2CH2 and cyclization of the resulting anils in the presence of a strong acid (e.g., H2SO4, polyphosphoric acid, or F3CCO2H) at 80-160.degree.C.

IT **232-85-9DP**, derivs.
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 232-85-9 CAPLUS
CN 3H-Pyrrolo[3,2-f]quinoline (8CI, 9CI) (CA INDEX NAME)

10080926

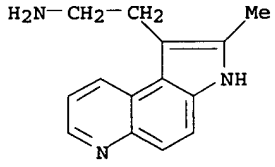


10

L15 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2003 ACS
AN 1969:481325 CAPLUS
DN 71:81325
TI 2-Methyl-3-(.beta.-aminoethyl-1H-pyrrolo[2,3-b]quinoline or 1-(.beta.-aminoethyl)-2-methyl-3H-pyrrolo(3,2-f]quinoline
IN Grandberg, I. I.; Yaryshev, N. G.
PA Timiryazev, K. A., Agricultural Academy
SO U.S.S.R.
From: Otkrytiya, Izobret., Prom. Obraztsy, Tovarnye Znaki 1969, 46(14), 23.
CODEN: URXXAF
DT **Patent**
LA Russian
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
SU 241441		19690418	SU	19671215

AB The title compd. is prepd. by treating 2- or 8-hydrazinoquinoline with Me .gamma.-chloropropyl ketone at boiling in an alc. medium, with subsequent sepn. of the desired product.
IT **23758-94-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 23758-94-3 CAPLUS
CN 3H-Pyrrolo[3,2-f]quinoline, 1-(2-aminoethyl)-2-methyl- (8CI) (CA INDEX NAME)



10

L15 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2003 ACS
AN 1969:79169 CAPLUS
DN 70:79169
TI Polymethine dyes
IN Zhiryakov, V. G.; Abramenko, P. I.; Sennikova, N. I.
PA All-Union Scientific-Research Cinema-Photographic Institute
SO U.S.S.R.
From: Izobret., Prom. Obraztsy, Tovarnye Znaki 1967, 44(13), 176-7.
CODEN: URXXAF
DT **Patent**
LA Russian
FAN.CNT 1

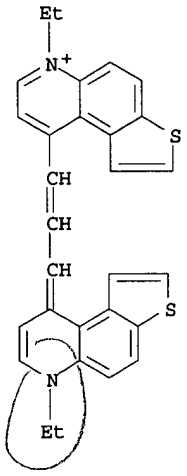
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
SU 198130		19670609	SU	19660722

GI For diagram(s), see printed CA Issue.
AB Polymethine dyes of the cyanine and merocyanine series, useful as optical sensitizers for AgCl-contg. photographic emulsions in the 520-790 m.mu. wavelength range, are prepd. Thus, a mixt. of 0.72 g. 9-methylthieno[3,2-f]quinoline ethiodide (I), 0.7 g. HC(OEt)3, and 3 ml. PhNO2 was heated for 30 min. at 180.degree.. The product was pptd. with Et2O, redissolved in 3 ml. EtOH, treated with 3 ml. of 10% aq. KI soln., and cooled to give 0.26 g. II, m. 261-3.degree., .lambda.EtOHmax. 729 m.mu., sensitization range 720-90 m.mu. with a max. at 760 m.mu.. Similar treatment of the 7-Me analog (III) of I gave IV (R = Et, Z = thieno[3,2-f]quinolin-7-ylidene), m. >300.degree., .lambda.EtOHmax. 635 m.mu., sensitization range 560-720 m.mu. with a max. at 670 m.mu.. A mixt. of 0.36 g. I and 0.3 g. V in 5 ml. EtOH was heated for 30 min. with 0.1 g. Et3N to give 0.3 g. VI, m. 232-4.degree. (EtOH), .lambda.EtOHmax. 625 m.mu., sensitization range to 700 m.mu. with a max. at 660 m.mu..

Similarly III and V gave the analog of VI, m. 241-3.degree. (EtOH), .lambda.EtOHmax. 584 m.mu., sensitization range 530-690 m.mu. with a max. at 620 m.mu.. Treatment of 2-[2-(N-phenylacetamido)vinyl]benzothiazole or its O or Se analogs with 7-methylthieno[3,2-f]quinoline meth-iodide (VII) and Et3N in Ac2O gave the following IV (R = Me) [ZH2, m.p., .lambda.EtOHmax. (m.mu.), sensitization range (m.mu.), and sensitization max. (m.mu.) given]: 3-ethylbenzothiazoline, 261-3.degree. (EtOH), 593, to 680, 625; 3-ethylbenzoselenazoline, 253-4.degree. (EtOH), 597, to 680, 630; 3-ethylbenzoxazoline, 254-6.degree. (EtOH), 559, to 680, 590. Heating 0.36 g. VII with 0.18 g. p-Me2NC6H4CHO in 2 ml. pyridine in the presence of 0.05 g. piperidine at 100.degree. for 1 hr. gave 0.28 g. 7-(p-dimethylamino-.omega.-styryl)thieno[3,2-f]quinoline methiodide, m. 277-9.degree. (EtOH), .lambda.EtOHmax. 528 m.mu., sensitizing range to 600 m.mu. with a max. at 580 m.mu..

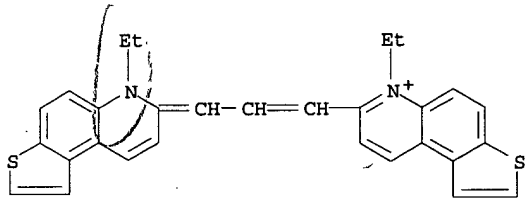
IT **20048-75-3P 20048-76-4P 20048-79-7P 20048-80-0P 20048-81-1P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(prepn. of)

RN 20048-75-3 CAPLUS
CN Thieno[3,2-f]quinolinium, 6-ethyl-9-[3-(6-ethylthieno[3,2-f]quinolin-9(6H)-ylidene)propenyl]-, iodide (8CI) (CA INDEX NAME)



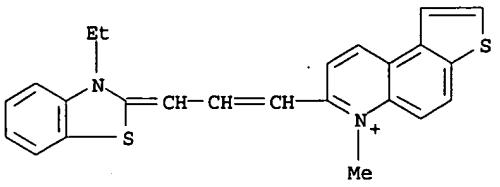
● I⁻

RN 20048-76-4 CAPLUS
CN Thieno[3,2-f]quinolinium, 6-ethyl-7-[3-(6-ethylthieno[3,2-f]quinolin-7(6H)-ylidene)propenyl]-, iodide (8CI) (CA INDEX NAME)



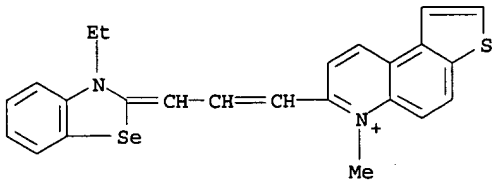
● I⁻

RN 20048-79-7 CAPLUS
CN Thieno[3,2-f]quinolinium, 7-[3-(3-ethyl-2-benzothiazolinylidene)propenyl]-6-methyl-, iodide (8CI) (CA INDEX NAME)



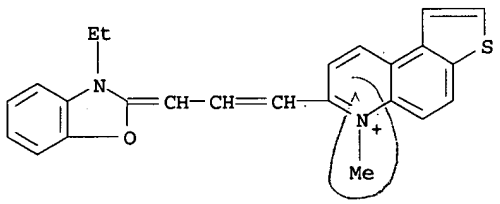
● I^-

RN 20048-80-0 CAPLUS
CN Thieno[3,2-f]quinolinium, 7-[3-(3-ethyl-2-benzoselenazolinylidene)propenyl]-6-methyl-, iodide (8CI) (CA INDEX NAME)



● I^-

RN 20048-81-1 CAPLUS
CN Thieno[3,2-f]quinolinium, 7-[3-(3-ethyl-2-benzoxazolinylidene)propenyl]-6-methyl-, iodide (8CI) (CA INDEX NAME)



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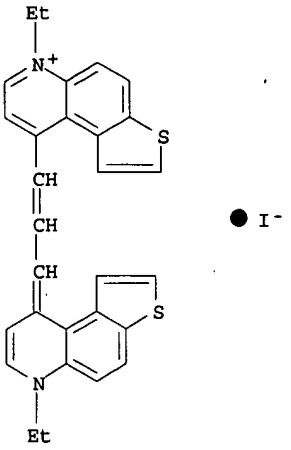
L15 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2003 ACS
AN 1968:468262 CAPLUS
DN 69:68262
TI Polymethine dyes
IN Zharyakov, V. G.; Abramenko, P. I.; Sennikova, N. I.
PA All-Union Scientific-Research Cinema-Photographic Institute
SO U.S.S.R.
From: Izobret., Prom. Obraztsy, Tovarnye Znaki 1967, 44(13), 176-7.
CODEN: URXXAF
DT **Patent**
LA Russian
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
SU 198130		19670609	SU	19660722

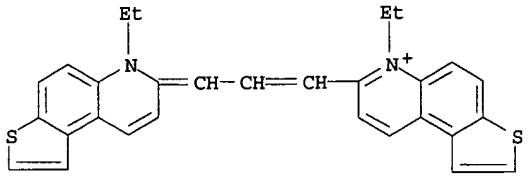
GI For diagram(s), see printed CA Issue.
AB Polymethine dyes suitable for the optical sensitization of Ag halide photographic emulsions have the general formulas I-III, where R is alkyl; Z is a 7- or 9-thieno[3,2-f] quinoline residue; Z' is a benzothiazole, benzoxazole, benzoselenazole, 7- or 9-thieno [3,2-f] quinoline residue; and X is an acid residue. These dyes are prepd. by condensing quaternary salts of 7- or 9-methylthieno [3,2-f] quinoline with intermediates such as HC(OEt)3, 3-ethyl-5-(.alpha.acetylanilinomethylene)thiazolidine-2-thion-4-one, 2-(.beta.-acetanilinovinyl)benzothiazole, or 4-Me2NC6H4CHO.
IT **20048-75-3P 20048-76-4P 20048-78-6P**

20048-79-7P 20048-80-0P 20048-81-1P
20048-82-2P
RL: IMF (Industrial manufacture); PREP (Preparation)
(prepn. of)

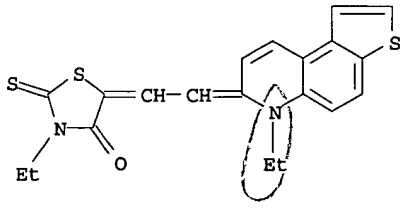
RN 20048-75-3 CAPLUS
CN Thieno[3,2-f]quinolinium, 6-ethyl-9-[3-(6-ethylthieno[3,2-f]quinolin-9(6H)-ylidene)propenyl]-, iodide (8CI) (CA INDEX NAME)



RN 20048-76-4 CAPLUS
CN Thieno[3,2-f]quinolinium, 6-ethyl-7-[3-(6-ethylthieno[3,2-f]quinolin-7(6H)-ylidene)propenyl]-, iodide (8CI) (CA INDEX NAME)

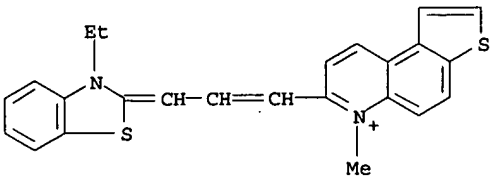


RN 20048-78-6 CAPLUS
CN Rhodanine, 3-ethyl-5-[2-(6-ethylthieno[3,2-f]quinolin-7(6H)-ylidene)ethylidene]- (8CI) (CA INDEX NAME)



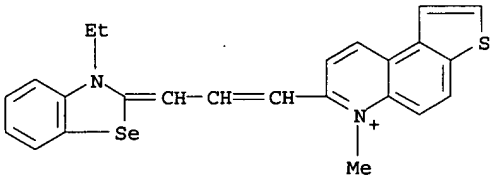
RN 20048-79-7 CAPLUS
CN Thieno[3,2-f]quinolinium, 7-[3-(3-ethyl-2-benzothiazolinylidene)propenyl]-6-methyl-, iodide (8CI) (CA INDEX NAME)

10080926



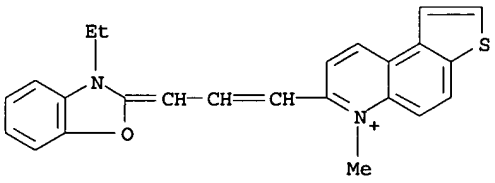
● I⁻

RN 20048-80-0 CAPLUS
CN Thieno[3,2-f]quinolinium, 7-[3-(3-ethyl-2-benzoselenazolinylidene)propenyl]-6-methyl-, iodide (8CI) (CA INDEX NAME)



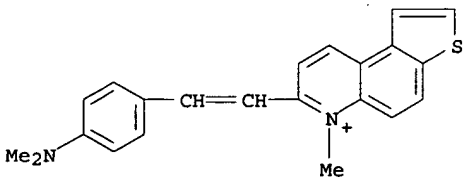
● I⁻

RN 20048-81-1 CAPLUS
CN Thieno[3,2-f]quinolinium, 7-[3-(3-ethyl-2-benzoxazolinylidene)propenyl]-6-methyl-, iodide (8CI) (CA INDEX NAME)



● I⁻

RN 20048-82-2 CAPLUS
CN Thieno[3,2-f]quinolinium, 7-[p-(dimethylamino)styryl]-6-methyl-, iodide (8CI) (CA INDEX NAME)



● I⁻

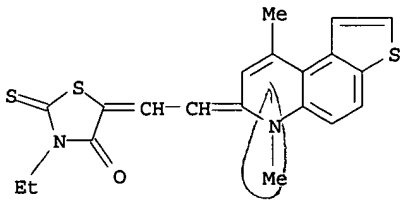
L15 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2003 ACS
AN 1968:88212 CAPLUS
DN 68:88212
TI Polymethine dyes of the cyanine and merocyanine blue-type
IN Abramenko, P. I.; Sennikova, N. I.
PA All-Union Scientific-Research Institute of Chemical-Photographic Industry

10080926

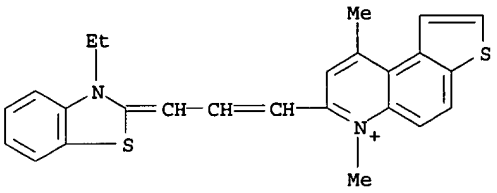
SO U.S.S.R.
From: Izobret., Prom. Obraztsy, Tovarnye Znaki 1967, 44(16), 183.
CODEN: URXXAF
DT **Patent**
LA Russian
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI SU 200426		19670713	SU	19661110

GI For diagram(s), see printed CA Issue.
AB The title compds. of the general formulas I and II, where R is alkyl, Z is a 1-methylthionaphtheno[3,2-b]-3-pyridine residue, or a 9-methylthieno[3,2-f]-7-quinoline residue, Z1 is a benzothiazole residue or a 9-methylthieno[3,2-f]-7-quinoline residue, and X- is an anion, are useful for optical sensitization of silver halide photographic emulsions. They are prepd. from quaternary salts of 1,3-dimethylthionaphtheno[3,2-b]pyridine (III) or 7,9-dimethylthieno[3,2-f]quinoline (IV) by condensation with intermediates usually used in the synthesis of polymethine dyes, e.g. HC(OEt)3, 3-ethyl-5-(acetanilidomethylene)thiazolidine-2-thion-4-one, and 2-(.beta.-acetanilidovinyl)benzothiazole.
IT **19132-41-3P 19132-42-4P 20324-86-1P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(prepn. of)
RN 19132-41-3 CAPLUS
CN Rhodanine, 5-[2-(6,9-dimethylthieno[3,2-f]quinolin-7(6H)-ylidene)ethylidene]-3-ethyl- (8CI) (CA INDEX NAME)

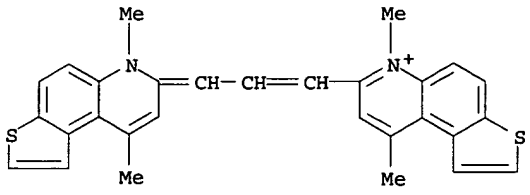


RN 19132-42-4 CAPLUS
CN Thieno[3,2-f]quinolinium, 7-[3-(3-ethyl-2-benzothiazolinylidene)propenyl]-6,9-dimethyl-, iodide (8CI) (CA INDEX NAME)



● I⁻

RN 20324-86-1 CAPLUS
CN Thieno[3,2-f]quinolinium, 6-[3-(6,9-dimethylthieno[3,2-f]quinolin-7(6H)-ylidene)propenyl]-6,9-dimethyl-, iodide (8CI) (CA INDEX NAME)



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L1             STRUCTURE UPLOADED
L2           4 S L1

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     FILE 'REGISTRY' ENTERED AT 18:48:59 ON 03 JUN 2003
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L4           2 S L3

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L5             STRUCTURE UPLOADED
L6           9 S L5

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     FILE 'REGISTRY' ENTERED AT 18:57:50 ON 03 JUN 2003
L7             STRUCTURE UPLOADED
L8           8 S L7

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     FILE 'REGISTRY' ENTERED AT 19:04:54 ON 03 JUN 2003
L9             STRUCTURE UPLOADED
L10          7 S L9
L11        372 S L9 SSS FULL

     FILE 'CAPLUS' ENTERED AT 19:06:03 ON 03 JUN 2003
L12         78 S L11
L13         10 S L11/THU
L14         68 S L12 NOT L13
L15         11 S L14 AND PATENT/DT

=> d l14 not l15
L15 IS NOT VALID HERE
For an explanation, enter "HELP DISPLAY".

=> s l14 not l15
L16         57 L14 NOT L15

=> d 1,5,10,15,20,25,30,35,40,45,50,55,57 bib abs hitstr

L16  ANSWER 1 OF 57  CAPLUS  COPYRIGHT 2003 ACS
AN   2002:338062  CAPLUS
DN   137:232531
TI   Novel facile synthesis of 2,2,4-substituted-1,2-dihydroquinolines via a
     modified Skraup reaction
AU   Theoclitou, Maria-Elena; Robinson, Leslie A.
CS   Pharma Research Laboratories, Bristol-Myers Squibb, San Diego, CA, 92121,
     USA
SO   Tetrahedron Letters (2002), 43(21), 3907-3910
     CODEN: TELEAY; ISSN: 0040-4039
PB   Elsevier Science Ltd.
DT   Journal
LA   English
OS   CASREACT 137:232531
AB   A variety of 2,2,4-substituted-1,2-dihydroquinolines were synthesized from
     substituted anilines or aminoheterocycles and the corresponding ketones in
     good yield via the use of lanthanide catalysts and microwave technol.
     This method can be readily applied to the general synthesis of
     combinatorial libraries of dihydroquinolines.
IT   459169-97-2P 459170-00-4P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (microwave Skraup prepn. of dihydroquinolines)
RN   459169-97-2  CAPLUS
CN   3H-Pyrrolo[3,2-f]quinoline, 6,7-dihydro-7,7,9-trimethyl- (9CI)  (CA INDEX
     NAME)
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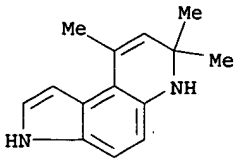
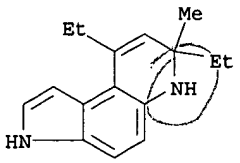
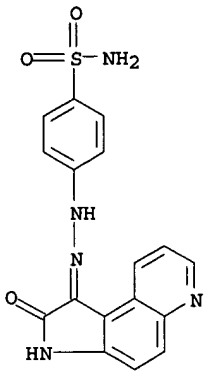


RN 459170-00-4 CAPLUS
CN 3H-Pyrrolo[3,2-f]quinoline, 7,9-diethyl-6,7-dihydro-7-methyl- (9CI) (CA INDEX NAME)



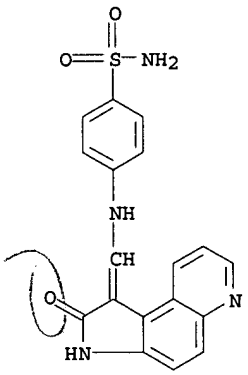
RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 5 OF 57 CAPLUS COPYRIGHT 2003 ACS
AN 2001:795458 CAPLUS
DN 136:102256
TI Oxindole-Based Inhibitors of Cyclin-Dependent Kinase 2 (CDK2): Design, Synthesis, Enzymatic Activities, and X-ray Crystallographic Analysis
AU Bramson, H. Neal; Corona, John; Davis, Stephen T.; Dickerson, Scott H.; Edelstein, Mark; Frye, Stephen V.; Gampe, Robert T., Jr.; Harris, Phil A.; Hassell, Anne; Holmes, William D.; Hunter, Robert N.; Lackey, Karen E.; Lovejoy, Brett; Luzzio, Michael J.; Montana, Val; Rocque, Warren J.; Rusnak, David; Shewchuk, Lisa; Veal, James M.; Walker, Duncan H.; Kuyper, Lee F.
CS GlaxoSmithKline Inc., Research Triangle Park, NC, 27709, USA
SO Journal of Medicinal Chemistry (2001), 44(25), 4339-4358
CODEN: JMCMAR; ISSN: 0022-2623
PB American Chemical Society
DT Journal
LA English
AB Two closely related classes of oxindole-based compds., 1H-indole-2,3-dione 3-phenylhydrazones and 3-(anilinomethylene)-1,3-dihydro-2H-indol-2-ones, were shown to potently inhibit cyclin-dependent kinase 2 (CDK2). The initial lead compd. was prepd. as a homolog of the 3-benzylidene-1,3-dihydro-2H-indol-2-one class of kinase inhibitor. Crystallog. anal. of the lead compd. bound to CDK2 provided the basis for analog design. A semiautomated method of ligand docking was used to select compds. for synthesis, and a no. of compds. with low nanomolar inhibitory activity vs. CDK2 were identified. Enzyme binding determinants for several analogs were evaluated by X-ray crystallog. Compds. in this series inhibited CDK2 with a potency .apprx.10-fold greater than that for CDK1. Members of this class of inhibitor cause an arrest of the cell cycle and have shown potential utility in the prevention of chemotherapy-induced alopecia.
IT **388627-23-4P 388627-25-6P**
RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. of 1H-indole-2,3-dione 3-phenylhydrazones and 3-(anilinomethylene)-1,3-dihydro-2H-indol-2-ones as inhibitors of cyclin-dependent kinase 2)
RN 388627-23-4 CAPLUS
CN Benzenesulfonamide, 4-[(2,3-dihydro-2-oxo-1H-pyrrolo[3,2-f]quinolin-1-ylidene)hydrazino]-, hydrochloride (4:3) (9CI) (CA INDEX NAME)



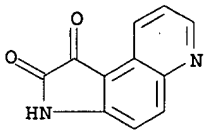
3/4 HCl

RN 388627-25-6 CAPLUS
CN Benzenesulfonamide, 4-[[(2,3-dihydro-2-oxo-1H-pyrrolo[3,2-f]quinolin-1-ylidene)methyl]amino]- (9CI) (CA INDEX NAME)

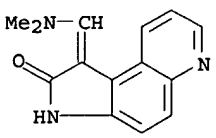


IT **220904-94-9**, 1H-Pyrrolo[3,2-f]quinoline-1,2(3H)-dione
388628-24-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of 1H-indole-2,3-dione 3-phenylhydrazones and 3-(anilinomethylene)-1,3-dihydro-2H-indol-2-ones as inhibitors of cyclin-dependent kinase 2)

RN 220904-94-9 CAPLUS
CN 1H-Pyrrolo[3,2-f]quinoline-1,2(3H)-dione (9CI) (CA INDEX NAME)



RN 388628-24-8 CAPLUS
CN 2H-Pyrrolo[3,2-f]quinolin-2-one, 1-[(dimethylamino)methylene]-1,3-dihydro- (9CI) (CA INDEX NAME)

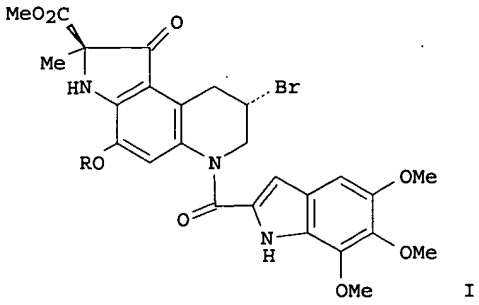


RE.CNT 60 THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS RECORD

10080926

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 10 OF 57 CAPLUS COPYRIGHT 2003 ACS
AN 1999:716681 CAPLUS
DN 132:49819
TI Synthesis and antitumor activity of water-soluble duocarmycin B1 prodrugs
AU Asai, Akira; Nagamura, Satoru; Kobayashi, Eiji; Gomi, Katsushige; Saito, Hiromitsu
CS Tokyo Research Laboratories, Kyowa Hakko Kogyo Co., Ltd, Machida, 194-8533, Japan
SO Bioorganic & Medicinal Chemistry Letters (1999), 9(20), 2995-2998
CODEN: BMCLE8; ISSN: 0960-894X
PB Elsevier Science Ltd.
DT Journal
LA English
GI



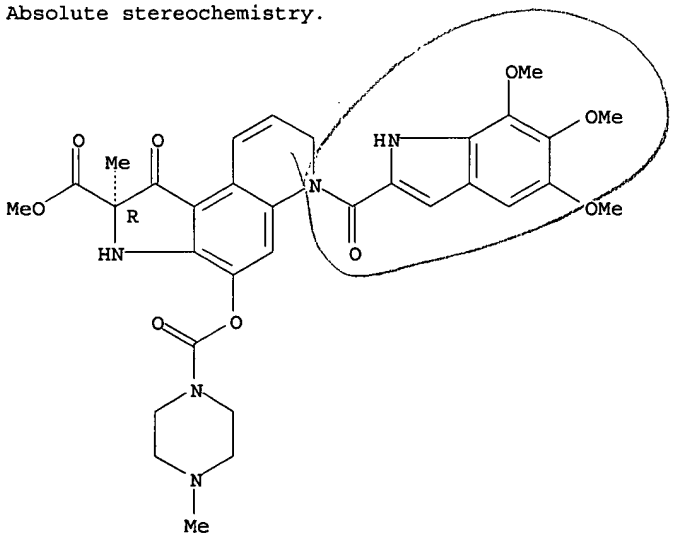
I

AB The water-sol. duocarmycin B1 prodrugs such as I (R = .beta.-D-glucopyranosyl; (OH)2OP; N-methylpiperazinylcarbonyl) were synthesized for improving biol. and pharmaceutical profiles of duocarmycin. Among these prodrugs, I (R = N-methylpiperazinylcarbonyl) exhibited potent antitumor activity against several human tumors in vivo.

IT **252959-11-8P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and antitumor activity of water-sol. duocarmycin B1 prodrugs)

RN 252959-11-8 CAPLUS
CN 1H-Pyrrolo[3,2-f]quinoline-2-carboxylic acid, 2,3,6,7-tetrahydro-2-methyl-4-[[(4-methyl-1-piperazinyl)carbonyl]oxy]-1-oxo-6-[(5,6,7-trimethoxy-1H-indol-2-yl)carbonyl]-, methyl ester, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

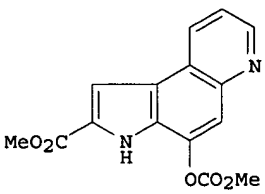


RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

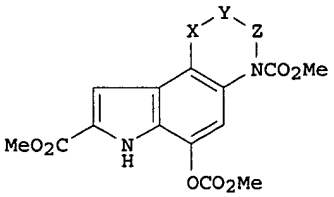
L16 ANSWER 15 OF 57 CAPLUS COPYRIGHT 2003 ACS

10080926

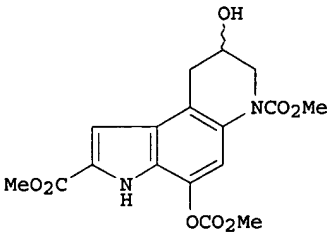
AN 1998:226505 CAPLUS
DN 128:294622
TI Synthesis of duocarmycin SA by way of methyl 4-(methoxycarbonyl)oxy-3H-pyrrolo[3,2-f]quinoline-2-carboxylate as a tricyclic heteroaromatic intermediate
AU Muratake, Hideaki; Tonegawa, Miyuki; Natsume, Mitsutaka
CS Research Foundation Itsuu Laboratory, Tokyo, 158, Japan
SO Chemical & Pharmaceutical Bulletin (1998), 46(3), 400-412
CODEN: CPBTAL; ISSN: 0009-2363
PB Pharmaceutical Society of Japan
DT Journal
LA English
OS CASREACT 128:294622
GI



I

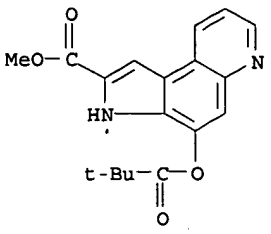


II

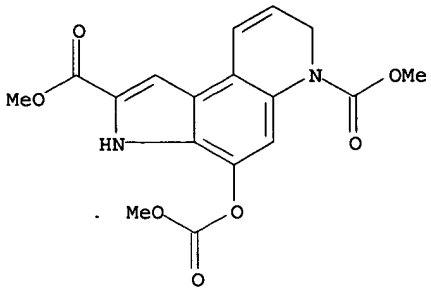


III

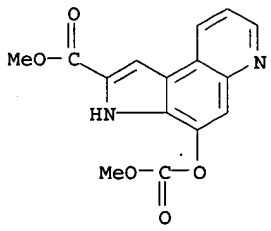
AB The new synthetic path proposed that a fully arom. I would afford the dihydropyridine deriv. II (X=Y = CH=CH, Z = CH2; X = CH2, Y=Z = CH=CH) on partial redn. and by making use of the double bonds formed, a hydroxyl group could be introduced at the required position either in a racemic or in an asym. way to yield III. The Stille coupling product obtained from the bromopyrrole with the stannylpyridine represented a potential precursor. Both Sharpless asym. dihydroxylation (AD) and Jacobsen's asym. epoxidn. were applied to II (X=Y = CH=CH, Z = CH2; X = CH2, Y=Z = CH=CH). At the best, 81% ee was obsd. in the AD reaction of II (X=Y = CH=CH, Z = CH2) using 2,5-diphenyl-4,6-bis(9-O-dihydroquinyl)pyrimidine [(DHQ)2PYR], but the product possessed an unnatural abs. configuration. Formal syntheses of (.+-.)-duocarmycin SA, natural (+)-duocarmycin SA and unnatural (-)-duocarmycin SA were accomplished via a tricyclic heteroarom. compd. I.
IT **182180-07-0P 182180-11-6P 182180-61-6P**
206115-48-2P 206115-49-3P 206115-55-1P
206115-56-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of duocarmycin SA via the tricyclic heteroarom. intermediate Me 4-(methoxycarbonyl)oxy-3H-pyrrolo[3,2-f]quinoline-2-carboxylate)
RN 182180-07-0 CAPLUS
CN 3H-Pyrrolo[3,2-f]quinoline-2-carboxylic acid, 4-(2,2-dimethyl-1-oxopropoxy)-, methyl ester (9CI) (CA INDEX NAME)



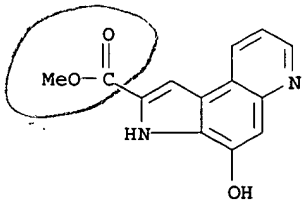
RN 182180-11-6 CAPLUS
CN 6H-Pyrrolo[3,2-f]quinoline-2,6-dicarboxylic acid, 3,7-dihydro-4-[(methoxycarbonyl)oxy]-, dimethyl ester (9CI) (CA INDEX NAME)



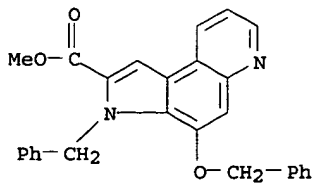
RN 182180-61-6 CAPLUS
CN 3H-Pyrrolo[3,2-f]quinoline-2-carboxylic acid, 4-[(methoxycarbonyl)oxy]-, methyl ester (9CI) (CA INDEX NAME)



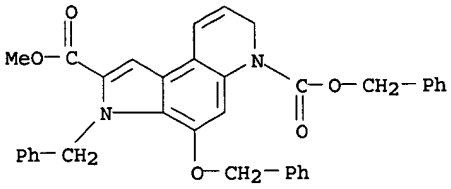
RN 206115-48-2 CAPLUS
CN 3H-Pyrrolo[3,2-f]quinoline-2-carboxylic acid, 4-hydroxy-, methyl ester (9CI) (CA INDEX NAME)



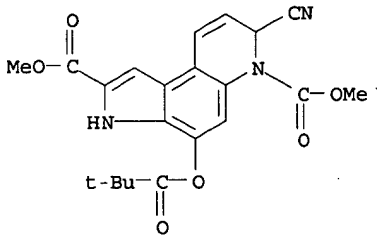
RN 206115-49-3 CAPLUS
CN 3H-Pyrrolo[3,2-f]quinoline-2-carboxylic acid, 4-(phenylmethoxy)-3-(phenylmethyl)-, methyl ester (9CI) (CA INDEX NAME)



RN 206115-55-1 CAPLUS
CN 6H-Pyrrolo[3,2-f]quinoline-2,6-dicarboxylic acid, 3,7-dihydro-4-(phenylmethoxy)-3-(phenylmethyl)-, 2-methyl 6-(phenylmethyl) ester (9CI) (CA INDEX NAME)

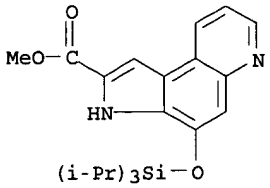


RN 206115-56-2 CAPLUS
CN 6H-Pyrrolo[3,2-f]quinoline-2,6-dicarboxylic acid, 7-cyano-4-(2,2-dimethyl-1-oxopropoxy)-3,7-dihydro-, dimethyl ester (9CI) (CA INDEX NAME)

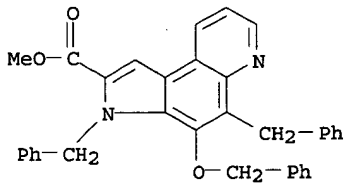


IT **206115-47-1P 206115-50-6P 206115-52-8P**
206115-57-3P 206115-62-0P 206115-64-2P
206115-76-6P 206115-77-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of duocarmycin SA via the tricyclic heteroarom. intermediate Me 4-(methoxycarbonyl)oxy-3H-pyrrolo[3,2-f]quinoline-2-carboxylate)

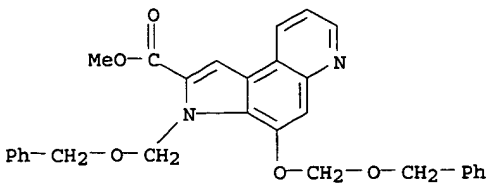
RN 206115-47-1 CAPLUS
CN 3H-Pyrrolo[3,2-f]quinoline-2-carboxylic acid, 4-[[tris(1-methylethyl)silyl]oxy]-, methyl ester (9CI) (CA INDEX NAME)



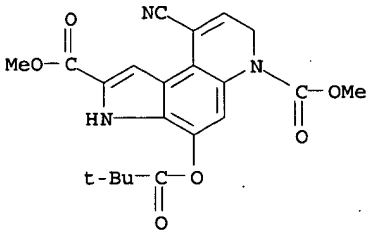
RN 206115-50-6 CAPLUS
CN 3H-Pyrrolo[3,2-f]quinoline-2-carboxylic acid, 4-(phenylmethoxy)-3,5-bis(phenylmethyl)-, methyl ester (9CI) (CA INDEX NAME)



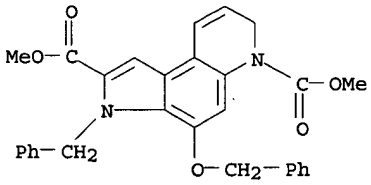
RN 206115-52-8 CAPLUS
CN 3H-Pyrrolo[3,2-f]quinoline-2-carboxylic acid, 4-[(phenylmethoxy)methoxy]-3-[(phenylmethoxy)methyl]-, methyl ester (9CI) (CA INDEX NAME)



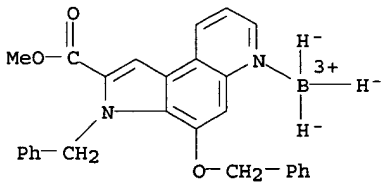
RN 206115-57-3 CAPLUS
CN 6H-Pyrrolo[3,2-f]quinoline-2,6-dicarboxylic acid, 9-cyano-4-(2,2-dimethyl-1-oxopropoxy)-3,7-dihydro-, dimethyl ester (9CI) (CA INDEX NAME)



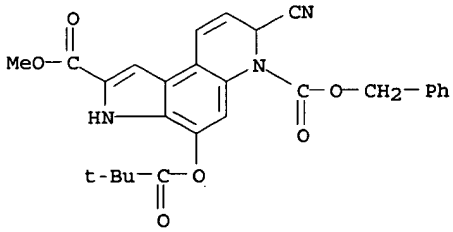
RN 206115-62-0 CAPLUS
CN 6H-Pyrrolo[3,2-f]quinoline-2,6-dicarboxylic acid, 3,7-dihydro-4-(phenylmethoxy)-3-(phenylmethyl)-, dimethyl ester (9CI) (CA INDEX NAME)



RN 206115-64-2 CAPLUS
CN Boron, trihydro[methyl 4-(phenylmethoxy)-3-(phenylmethyl)-3H-pyrrolo[3,2-f]quinoline-2-carboxylate-.kappa.N6]-, (T-4)- (9CI) (CA INDEX NAME)

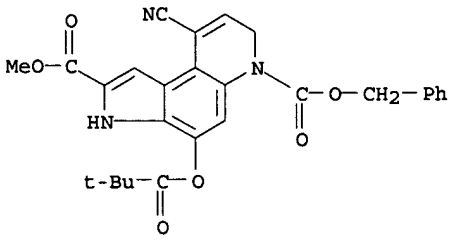


RN 206115-76-6 CAPLUS
CN 6H-Pyrrolo[3,2-f]quinoline-2,6-dicarboxylic acid, 7-cyano-4-(2,2-dimethyl-1-oxopropoxy)-3,7-dihydro-, 2-methyl 6-(phenylmethyl) ester (9CI) (CA INDEX NAME)



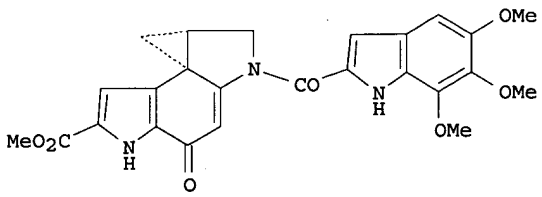
RN 206115-77-7 CAPLUS
CN 6H-Pyrrolo[3,2-f]quinoline-2,6-dicarboxylic acid, 9-cyano-4-(2,2-dimethyl-1-oxopropoxy)-3,7-dihydro-, 2-methyl 6-(phenylmethyl) ester (9CI) (CA

INDEX NAME)

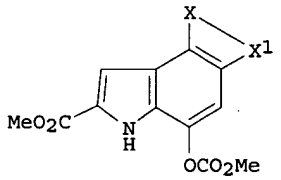


RE.CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 20 OF 57 CAPLUS COPYRIGHT 2003 ACS
AN 1996:542111 CAPLUS
DN 125:275476
TI Alternative synthesis of duocarmycin SA using a tricyclic heteroaromatic intermediate prepared by palladium-catalyzed coupling reactions
AU Muratake, Hideaki; Tonegawa, Miyuki; Natsume, Mitsutaka
CS Research Foundation Itsuu Lab., Tamagawa, 158, Japan
SO Chemical & Pharmaceutical Bulletin (1996), 44(8), 1631-1633
CODEN: CPBTAL; ISSN: 0009-2363
PB Pharmaceutical Society of Japan
DT Journal
LA English
OS CASREACT 125:275476
GI



I

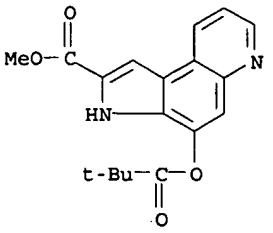


II

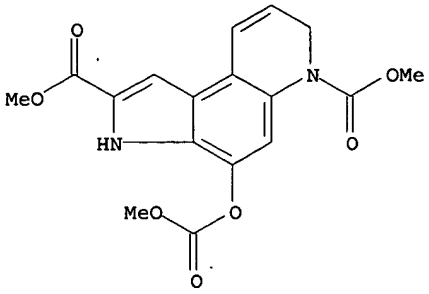
AB Alternative synthesis of duocarmycin SA I was achieved by developing a novel prepn. method using palladium catalysts for a tricyclic heteroarom. compd. II (XX1 = CH:CHCH:N), followed by transformation into the previously reported intermediates via the alc. II [XX1 = CH2CH(OH)CH2N(CO2Me)].

IT **182180-07-0P 182180-11-6P 182180-61-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(novel prepn. of duocarmycin SA via the key tricyclic heteroarom. intermediate prepd. by palladium-catalyzed coupling reactions)

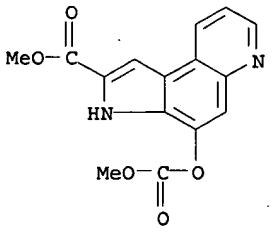
RN 182180-07-0 CAPLUS
CN 3H-Pyrrolo[3,2-f]quinoline-2-carboxylic acid, 4-(2,2-dimethyl-1-oxopropoxy)-, methyl ester (9CI) (CA INDEX NAME)



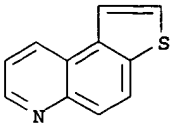
RN 182180-11-6 CAPLUS
CN 6H-Pyrrolo[3,2-f]quinoline-2,6-dicarboxylic acid, 3,7-dihydro-4-[(methoxycarbonyl)oxy]-, dimethyl ester (9CI) (CA INDEX NAME)



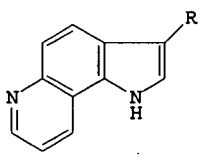
RN 182180-61-6 CAPLUS
CN 3H-Pyrrolo[3,2-f]quinoline-2-carboxylic acid, 4-[(methoxycarbonyl)oxy]-, methyl ester (9CI) (CA INDEX NAME)



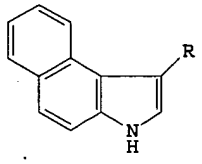
L16 ANSWER 25 OF 57 CAPLUS COPYRIGHT 2003 ACS
AN 1995:628107 CAPLUS
DN 123:82711
TI Structural chemistry of polycyclic heteroaromatic compounds. Part 6. Photoelectron spectra and electronic structures of polycyclic heptarenes: thienoquinolines and thienoisoquinolines
AU Marzinzik, A. L.; Rademacher, P.
CS Institute of Organic Chemistry, University of Essen, Essen, D-45117, Germany
SO Journal of Molecular Structure (1995), 351, 107-17
CODEN: JMOSB4; ISSN: 0022-2860
PB Elsevier
DT Journal
LA English
AB The He(1) photoelectron spectra of 13 isomeric thienoquinolines and thienoisoquinolines and the .pi.-isoelectronic naphthothiophenes are reported and discussed. The assignments for the latter compds. are made by using the sulfur double-bond model taking phenanthrene (I) as the ref. mol. The shape and the energies of the .pi. MOs of thienoquinolines and thienoisoquinolines can be estd. from those of I by first-order perturbation theory. This concept is very useful for distinguishing isomeric thienoquinolines and thienoisoquinolines.
IT **233-03-4**, Thieno[3,2-f]quinoline
RL: PRP (Properties)
(photoelectron spectra and electronic structures of thienoquinolines, thienoisoquinolines, and naphthothiophenes)
RN 233-03-4 CAPLUS
CN Thieno[3,2-f]quinoline (8CI, 9CI) (CA INDEX NAME)



L16 ANSWER 30 OF 57 CAPLUS COPYRIGHT 2003 ACS
AN 1989:75273 CAPLUS
DN 110:75273
TI Reactivity of 1H-pyrrolo[2.3-f]-3H-pyrrolo[3.2-f]quinolines and their derivatives
AU Gryaznov, A. P.
CS Mosk. S-Kh. Akad., Moscow, USSR
SO Izvestiya Timiryazevskoi Sel'skokhozyaistvennoi Akademii (1988), (3), 185-90
CODEN: ITSAA7; ISSN: 0021-342X
DT Journal
LA Russian
OS CASREACT 110:75273
GI



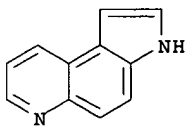
I



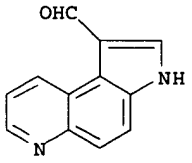
II

AB The reactivity of isomeric pyrroloquinolines I (R = H) and II (R = H) and their derivs. I (R = CHO) and II (R = CHO) were investigated. Thus, I (R = H) or II (R = H) reacted with HCHO and Me2NH to give I (R = CH2NMe2) and II (R = CH2NMe)2, resp. Also, I (R = CHO) and II (R = CHO) reacted with CH2(CO2H)2, NH2NHC(:S)NH2, and NH2OH.HCl to give I [R = CHZ, Z = CH(CO2H), NNHC(:S)NH2, NOH] and II (R = CHZ), resp.

IT **232-85-9**, 3H-Pyrrolo[3,2-f]quinoline
RL: RCT (Reactant); RACT (Reactant or reagent)
(formylation or aminomethylation of, reactivity in relation to)
RN 232-85-9 CAPLUS
CN 3H-Pyrrolo[3,2-f]quinoline (8CI, 9CI) (CA INDEX NAME)



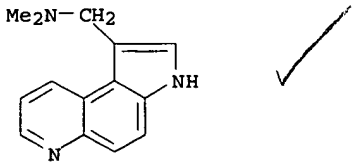
IT **118644-73-8P**, 1-Formyl-3H-pyrrolo[3,2-f]quinoline
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and condensation reactions of, reactivity in relation to)
RN 118644-73-8 CAPLUS
CN 3H-Pyrrolo[3,2-f]quinoline-1-carboxaldehyde (9CI) (CA INDEX NAME)



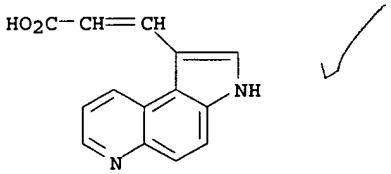
IT **118644-71-6P 118644-75-0P 118644-77-2P**

10080926

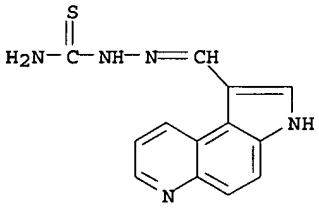
118644-80-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 118644-71-6 CAPLUS
CN 3H-Pyrrolo[3,2-f]quinoline-1-methanamine, N,N-dimethyl- (9CI) (CA INDEX NAME)



RN 118644-75-0 CAPLUS
CN 2-Propenoic acid, 3-(3H-pyrrolo[3,2-f]quinolin-1-yl)- (9CI) (CA INDEX NAME)

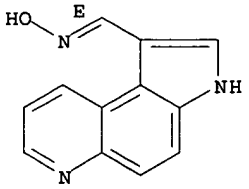


RN 118644-77-2 CAPLUS
CN Hydrazinecarbothioamide, 2-(3H-pyrrolo[3,2-f]quinolin-1-ylmethylene)- (9CI) (CA INDEX NAME)



RN 118644-80-7 CAPLUS
CN 3H-Pyrrolo[3,2-f]quinoline-1-carboxaldehyde, oxime, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



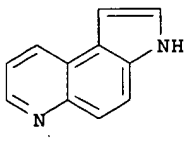
L16 ANSWER 35 OF 57 CAPLUS COPYRIGHT 2003 ACS
AN 1982:64053 CAPLUS
DN 96:64053
TI Isolation and identification of aza-arenes of tobacco smoke
AU Snook, M. E.; Fortson, P. J.; Chortyk, O. T.
CS Educ. Adm., USDA, Athens, GA, 30613, USA
SO Beitraege zur Tabakforschung International (1981), 11(2), 67-78
CODEN: BTAID3; ISSN: 0173-783X
DT Journal
LA English
AB The N analogs of polynuclear arom. hydrocarbons (aza-arenes) were isolated and identified in a basic fraction of cigaret smoke condensate. Silicic acid chromatog. removed the predominant nicotine alkaloids, while gel chromatog. on Bio-Beads S-X12 in benzene effectively sepd. the aza-arenes

from interfering aliph. compds. In addn., the gel columns sepd. the aza-arenes by ring no. and degree of alkylation on the basis of an adsorption-type mechanism. These gel characteristics facilitated the identifications of a large no. of isomeric aza-arenes. Compds. identified included 2-vinylpyridine [100-69-6], 3-vinylpyridine [1121-55-7], and 2-phenylpyridine [1008-89-5] as well as quinoline [91-22-5], isoquinoline [119-65-3], 4-azafluorene [244-99-5], benzoquinolines, benzoisoquinolines, 1-azafluoranthene [206-56-4], 7-azafluoranthene [206-49-5], 4-azapyrene [194-03-6], 7-azaindole [271-63-6], pyrroloquinoline, and their mono-, di-, and tri-Me derivs. All 8 possible isomers of benzoquinoline and benzoisoquinoline were found, 4 of which are being reported for the 1st time. Evidence was also found for the probable presence of 5,6-benzo-7-azaindole [110-86-1].

IT **232-85-9**
RL: ANST (Analytical study)
(of tobacco smoke, isolation and identification of)

RN 232-85-9 CAPLUS

CN 3H-Pyrrolo[3,2-f]quinoline (8CI, 9CI) (CA INDEX NAME)



L16 ANSWER 40 OF 57 CAPLUS COPYRIGHT 2003 ACS

AN 1980:146650 CAPLUS

DN 92:146650

TI Nitropyrroloquinolines

AU Yudin, L. G.; Yamashkin, S. A.; Terent'ev, P. B.; Solov'ev, O. A.

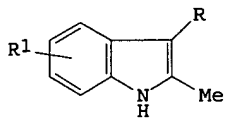
CS Mosk. Gos. Univ., Moscow, 117234, USSR

SO Khimiya Geterotsiklicheskikh Soedinenii (1979), (10), 1381-5
CODEN: KGSSAQ; ISSN: 0453-8234

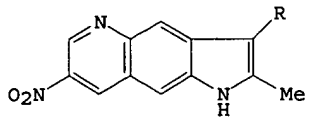
DT Journal

LA Russian

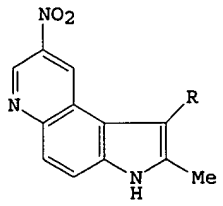
GI



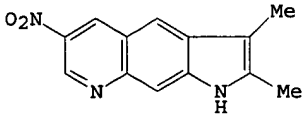
I



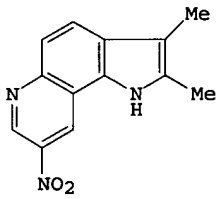
III



IV



V

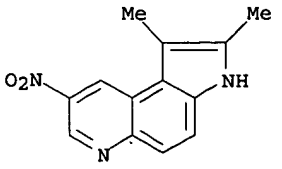


VI

AB Treatment of aminoindoles I (R = H, Me; R1 = 5-H2N, 6-NH2) with O2NCH(CHO)2 gave 79-86% I [R = H, Me; R1 = 5-, 6-OCHC(NO2):CHNH] (II) . Cyclocondensation of C-5 substituted II gave a mixt. of pyrroloquinolines III and IV in a 4:1 molar ratio. Similarly, C-6 substituted II (R = Me) gave a mixt. of V and VI in a 3:1 molar ratio. Mass spectra of III -VI were given.

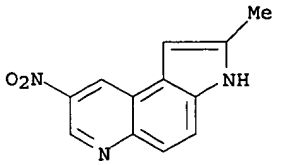
10080926

IT **72793-29-4P 72793-30-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 72793-29-4 CAPLUS
CN 3H-Pyrrolo[3,2-f]quinoline, 1,2-dimethyl-8-nitro- (9CI) (CA INDEX NAME)



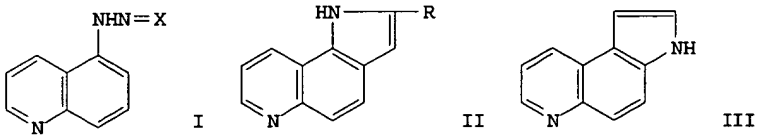
102

RN 72793-30-7 CAPLUS
CN 3H-Pyrrolo[3,2-f]quinoline, 2-methyl-8-nitro- (9CI) (CA INDEX NAME)

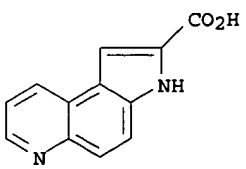


102

L16 ANSWER 45 OF 57 CAPLUS COPYRIGHT 2003 ACS
AN 1977:468196 CAPLUS
DN 87:68196
TI Pyrroloquinolines. II. Synthesis of 1H-pyrrolo[2,3-f]- and 3H-pyrrolo[3,2-f]quinolines
AU Gryaznov, A. P.; Akhvlediani, R. N.; Volodina, T. A.; Vasil'ev, A. M.; Babushkina, T. A.; Suvorov, N. N.
CS Mosk. Khim.-Tekhnol. Inst. im. Mendeleeva, Moscow, USSR
SO Khimiya Geterotsiklicheskikh Soedinenii (1977), (3), 369-76
CODEN: KGSSAQ; ISSN: 0132-6244
DT Journal
LA Russian
GI

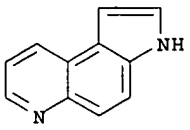


AB Hydrazinoquinoline I (X = H2), prepd. in 78% yield from the nitro deriv., was condensed with MeCOCO2Me to give 94% I (X = CMeCO2Et) as a mixt. of stereoisomers. Subsequent cyclization and sapon. gave 57% II (R = CO2H) which was decarboxylated to give 95% II (R = H). Analogously obtained was 95% III.
IT **63385-16-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and decarboxylation of)
RN 63385-16-0 CAPLUS
CN 3H-Pyrrolo[3,2-f]quinoline-2-carboxylic acid (9CI) (CA INDEX NAME)

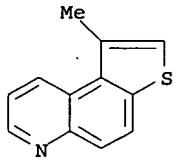


10080926

IT **232-85-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 232-85-9 CAPLUS
CN 3H-Pyrrolo[3,2-f]quinoline (8CI, 9CI) (CA INDEX NAME)



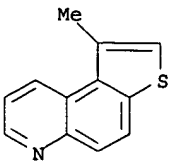
L16 ANSWER 50 OF 57 CAPLUS COPYRIGHT 2003 ACS
AN 1971:3531 CAPLUS
DN 74:3531
TI Substitution reactions of thieno[3,2-f]quinoline
AU Chapman, Norman Bellamy; Clarke, Kenneth; Sharma, K. S.
CS Dep. Chem., Univ. Hull, Hull, UK
SO Journal of the Chemical Society [Section] C: Organic (1970), (17), 2334-9
CODEN: JSOOAX; ISSN: 0022-4952
DT Journal
LA English
AB Mononitration, monobromination, and Friedel-Crafts acylation of thieno[3,2-f]quinoline occurred in the 2-position; dibromination in H2SO4 gave the 1,2-dibromo deriv. The Hunsdiecker reaction of thieno[3,2-f]quinoline-2-carboxylic acid gave a mixt. of 1,2,5-tribromothieno[3,2-f]quinoline and 5-bromothieno[3,2-f]quinoline-2-carboxylic acid in addn. to unchanged starting material. Bromination of Na thieno[3,2-f]-quinoline-2-carboxylate gave the 5-bromo acid. N-Methylthieno[3,2-f]quinolinium hydrogen sulfate was oxidized to N-methylthieno[3,2-f]quinolin-7-one, which, on treatment with PCl5, gave 7-chlorothieno[3,2-f]quinoline. However, the methosulfate reacted with aq. KCN to give 6,9-dihydro-N-methylthieno[3,2-f]quinoline-9-carbonitrile which, when oxidized with iodine in pyridine yielded 9-cyano-N-methylthieno[3,2-f]quinolinium iodide. Demethylation gave thieno[3,2-f]quinoline-9-carbonitrile. The Reissert compd. derived from thieno[3,2-f]-quinoline reacted with PCl5 to yield thieno[3,2-f]quinoline-7-carbonitrile, which on hydrolysis with HCl yielded the 7-carboxylic acid.
IT **29948-24-1P 29948-25-2P 29948-26-3P**
29948-27-4P 29970-37-4P 29970-38-5P
29970-39-6P 29970-40-9P 29970-43-2P
29970-44-3P 29970-45-4P 29970-46-5P
29970-47-6P 29970-48-7P 29970-50-1P
29970-51-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 29948-24-1 CAPLUS
CN Thieno[3,2-f]quinoline, 1-methyl- (8CI) (CA INDEX NAME)



RN 29948-25-2 CAPLUS
CN Thieno[3,2-f]quinoline, 1-methyl-, monopicrate (8CI) (CA INDEX NAME)

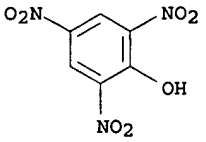
CM 1

CRN 29948-24-1
CMF C12 H9 N S

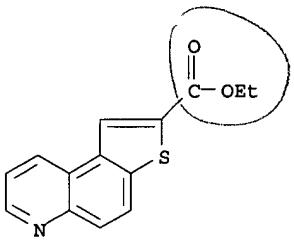


CM 2

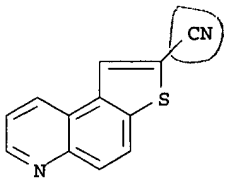
CRN 88-89-1
CMF C6 H3 N3 O7



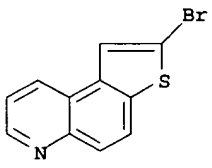
RN 29948-26-3 CAPLUS
CN Thieno[3,2-f]quinoline-2-carboxylic acid, ethyl ester (8CI, 9CI) (CA INDEX NAME)



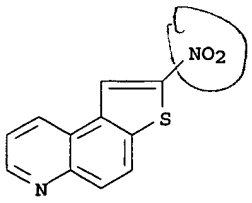
RN 29948-27-4 CAPLUS
CN Thieno[3,2-f]quinoline-2-carbonitrile (8CI) (CA INDEX NAME)



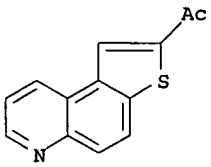
RN 29970-37-4 CAPLUS
CN Thieno[3,2-f]quinoline, 2-bromo- (8CI) (CA INDEX NAME)



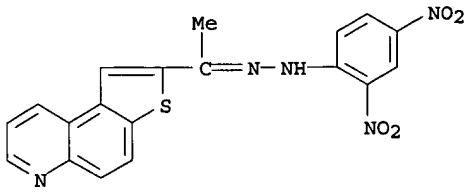
RN 29970-38-5 CAPLUS
CN Thieno[3,2-f]quinoline, 2-nitro- (8CI) (CA INDEX NAME)



RN 29970-39-6 CAPLUS
CN Ketone, methyl thieno[3,2-f]quinolin-2-yl (8CI) (CA INDEX NAME)



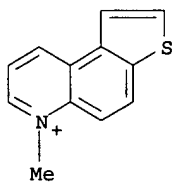
RN 29970-40-9 CAPLUS
CN Ketone, methyl thieno[3,2-f]quinolin-2-yl, (2,4-dinitrophenyl)hydrazone (8CI) (CA INDEX NAME)



RN 29970-43-2 CAPLUS
CN Thieno[3,2-f]quinolinium, 6-methyl-, methyl sulfate (8CI) (CA INDEX NAME)

CM 1

CRN 46255-83-8
CMF C12 H10 N S

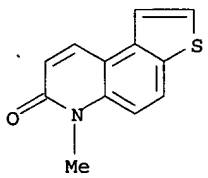


CM 2

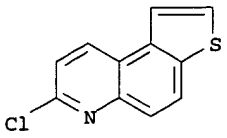
CRN 21228-90-0
CMF C H3 O4 S

Me—O—SO_3^-

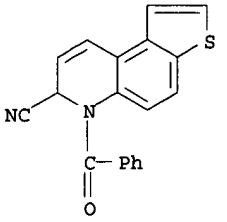
RN 29970-44-3 CAPLUS
CN Thieno[3,2-f]quinolin-7(6H)-one, 6-methyl- (8CI) (CA INDEX NAME)



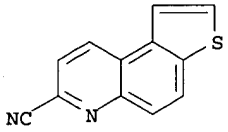
RN 29970-45-4 CAPLUS
CN Thieno[3,2-f]quinoline, 7-chloro- (8CI) (CA INDEX NAME)



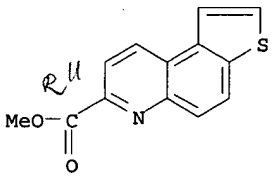
RN 29970-46-5 CAPLUS
CN Thieno[3,2-f]quinoline-7-carbonitrile, 6-benzoyl-6,7-dihydro- (8CI) (CA INDEX NAME)



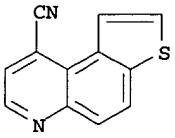
RN 29970-47-6 CAPLUS
CN Thieno[3,2-f]quinoline-7-carbonitrile (8CI, 9CI) (CA INDEX NAME)



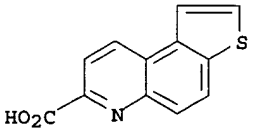
RN 29970-48-7 CAPLUS
CN Thieno[3,2-f]quinoline-7-carboxylic acid, methyl ester (8CI) (CA INDEX NAME)



RN 29970-50-1 CAPLUS
CN Thieno[3,2-f]quinoline-9-carbonitrile (8CI) (CA INDEX NAME)



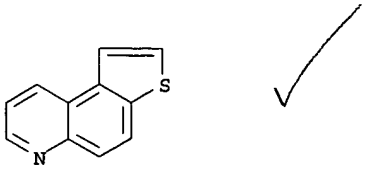
RN 29970-51-2 CAPLUS
CN Thieno[3,2-f]quinoline-7-carboxylic acid (8CI) (CA INDEX NAME)



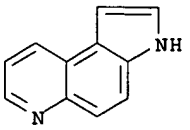
IT **233-03-4**
RL: RCT (Reactant); RACT (Reactant or reagent)

10080926

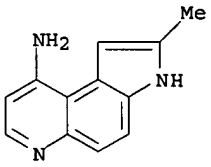
(substitution reactions of)
RN 233-03-4 CAPLUS
CN Thieno[3,2-f]quinoline (8CI, 9CI) (CA INDEX NAME)



L16 ANSWER 55 OF 57 CAPLUS COPYRIGHT 2003 ACS
AN 1962:38406 CAPLUS
DN 56:38406
OREF 56:7266a-h
TI Synthesis of 4,6-diaminoquinoline derivatives. I. Synthesis of pyrrolo[f]quinoline derivatives
AU Yoshikawa, Toshiyoshi
CS Univ. Kumamoto
SO Yakugaku Zasshi (1961), 81, 1317-22
CODEN: YKKZAJ; ISSN: 0031-6903
DT Journal
LA Unavailable
AB 3,4-Br(H2N)C9H5N (4.5 g.) in 30 ml. concd. H2SO4 at 0-3.degree. treated dropwise with a mixt. of 1.47 ml. HNO3 (d. 1.42) and 10 ml. concd. H2SO4, stirred 1 hr., the product poured on ice, made alk. with Na2CO3, and the ppt. recrystd. (Me2CO) gave 62% 2,4,6-Br(H2N)(O2N)C9H4N (I), m. 289.degree.. Catalytic redn. of I in EtOH acidified with HCl (Pd-C) gave 96% 4,6-(H2N)2C9H5N.2HCl, (II), needles, m. 319-20.degree. (decompn.). II (0.5 g.) in 0.8 ml. concd. HCl and 1 g. ice below 0.degree. treated dropwise with 0.17 g. NaNO2 in 10 ml. H2O at 5.degree., the diazonium salt soln. poured into 1.31 g. Na2SO3 in 10 ml. H2O at 0.degree., kept at 20.degree., dild. with 2 vols. H2O, acidified with HCl, heated 4 hrs. at 60-70.degree., cooled, equal vol. of concd. HCl added, the ppt. filtered off, taken up in a small amt. of H2O, filtered with C, and the filtrate treated with a small amt. of EtOH and satd. with HCl gas at 0.degree. gave 0.51 g. 4,6-H2N(H2NNH)C9H5N.2HCl (III), needles, m. 302.degree. (decompn.). III (0.15 g.) in H2O treated with PhCHO in EtOH and the ppt. filtered off gave 44% 4,6-H2N(R:NNH)C9H5N (IV) (R = PhCH), needles, m. 104.degree.. A mixt. of 0.1 g. III, 0.15 g. AcONa.3H2O, and 0.06 g. vanillin in EtOH reacted at room temp. to give 38% IV [R = 3,4-MeO(HO)C6H3CH], plates, m. 106.degree. (decompn.) (EtOH). Reaction of 0.2 g. III, 0.15 g. AcCO2H, and 0.4 g. AcONa.3H2O at room temp. and addn. of 1 ml. concd. HCl gave IV [R = Me(HO2C)C] as the HCl salt, m. 229-30.degree. (decompn.). III (0.5 g.) in Me2CO and 0.56 g. AcONa.3H2O refluxed 30 min., Me2CO removed, the residue made alk. with K2CO3, and the ppt. washed with EtOH gave 0.5 g. IV (R = Me2C) (V). m. 198.degree.. III (0.3 g.) in H2O, 0.15 g. PhCOMe in EtOH, and 0.3 g. AcONa.3H2O refluxed 1.5 hrs. gave 0.2 g. IV (R = PhMeC), needles, m. 178.degree.. A mixt. of 0.5 g. V, 1 g. ZnCl2, and 3 ml. p-cymene refluxed 2.5 hrs. at 200-10.degree. in N, the p-cymene decanted, and the residue extd. with abs. EtOH gave 29% 2-methyl-9-amino-3H-pyrrolo[3,2-f]quinoline (VI).ZnCl2, needles, m. 117.degree.. VI.ZnCl2 (0.13 g.) in 25% KOH refluxed, the soln. concd., and the residue crystd. (EtOH) gave 81% VI, m. 105.degree. (decompn.). 6-(Me2C:NNH)C9H6N (1 g.), 2 g. ZnCl2, and 6 ml. p-cymene heated 2.5 hrs. at 175-80.degree. and concd. gave 0.6 g. ppt., m. 175-8.degree.; this extd. with CHCl3, and filtered with C, and the filtrate chromatographed (Al2O3) gave 36% 2-methyl-3H-pyrrolo[3,2-f]quinoline (VII), m. 198.degree. (C6H6); the CHCl3-insol. residue extd. with EtOH gave VII.ZnCl2, m. 267.degree.. IV (R = PhMeC) (0.2 g.), 0.5 g. ZnCl2, and 2 ml. p-cymene heated 2.5 hrs. at 190-200.degree. and the product treated as above gave 37% 2-phenyl-9-amino-3H-pyrrolo[3,2-f]quinoline-2H2O, needles, m. 110.degree. (Me2CO-Et2O). III (0.41 g.), 0.02 g. cyclohexanone in EtOH, and 0.03 g. AcONa.3H2O refluxed 50 min., the soln. made alk. with concd. NH1OH, the oily portion taken up in AcOH, heated 10 min. at 75-80.degree. with 2 drops concd. H2SO4, and the soln. poured into ice H2O gave 1-amino-8,9,10,11-tetrahydro-7H-pyrido[2,3-c]carbazole-0.5H2SO4.H2O, prisms, m. 345.degree. (decompn.) (MeOH).
IT **232-85-9**, 3H-Pyrrolo[3,2-f]quinoline
(derivs.)
RN 232-85-9 CAPLUS
CN 3H-Pyrrolo[3,2-f]quinoline (8CI, 9CI) (CA INDEX NAME)



IT **95196-74-0**, 3H-Pyrrolo[3,2-f]quinoline, 9-amino-2-methyl-
96418-17-6, 3H-Pyrrolo[3,2-f]quinoline, 2-methyl-
97789-00-9, 3H-Pyrrolo[3,2-f]quinoline, 9-amino-2-phenyl-
(prepn. of)
RN 95196-74-0 CAPLUS
CN 3H-Pyrrolo[3,2-f]quinoline, 9-amino-2-methyl- (7CI) (CA INDEX NAME)



RN 96418-17-6 CAPLUS
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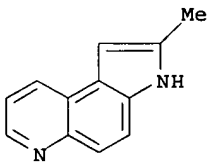
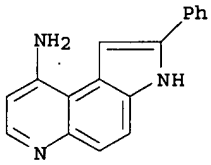


RN 97789-00-9 CAPLUS
CN 3H-Pyrrolo[3,2-f]quinoline, 9-amino-2-phenyl- (7CI) (CA INDEX NAME)



L16 ANSWER 57 OF 57 CAPLUS COPYRIGHT 2003 ACS
AN 1948:32069 CAPLUS
DN 42:32069
OREF 42:6823g-i,6824a-c
TI The constitution of calycanthines. II. Synthesis and absorption spectra of the compound C12H10N2
AU Eiter, K.
CS Univ. Vienna
SO Monatsh. (1948), 79, 17-21
DT Journal
LA Unavailable
GI For diagram(s), see printed CA Issue.
AB Pure 2-carboline (VI), m. 215.degree. (0.2 g.), 0.0274 g. Na, and 3 cc. freshly distd. C10H7Me (VII) were heated 5 hrs. in an open tube at 200-10.degree., 0.5 cc. MeI added, the tube sealed and heated overnight at 100.degree., VII removed in vacuo, and the residue distd. to give at 140.degree. a yellow oil (VIII) which crystd. VIII on refractionation gave 0.1175 g. N-methyl-2-carboline (IX), a blue fluorescing oil distg. at 110-30.degree., m. 53.degree. (from Et2O-petr. ether). IX, also prepd. by heating 0.156 g. VI and 0.5 cc. MeI in a sealed tube 12 hrs. at 100.degree. (yield, 0.019 g.), was a pale yellow oil distg. at 90-100.degree.; picrate, yellow needles, m. 225.degree. (decompn.) (from alc.). 4-Carboline (X), m. 225.degree. (0.2 g.), 0.0274 g. Na, and freshly distd. VII treated as above with 0.5 cc. MeI gave 50 mg. N-methyl-4-carboline (XI), colorless oil, distg. at 130-50.degree., m. 88.degree.. From 0.1 g. X and MeI as above was obtained 0.021 g. XI;

picrate, needles, m. 261.degree. (decompn.) (from EtOH). IV was shown by mixed m.p. not to be IX or XI. The absorption curve of IV in dioxane showed 2 max. at 306 and 242 m.mu., and some similarity to the curves of pyrroquinolines (C.A. 33, 8202.1). For spectral comparison 2 unsuccessful attempts were made to prep. N-methylpyrroquinoline (XII); pyrroquinolinecarboxylic acid fused with ZnCl2 gave the free pyrroquinoline (XIII) but treatment of XIII with (1) Na or K in VII, followed by MeI, or (2) MeI at high temp. gave no XII. The reaction of XIII with H2CO and HCO2H was also unsuccessful. The authors propose XIV and XV as possible structures of IV.

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(prepn. of)

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